We would like to thank Alberta Workforce Essential Skills (AWES), in partnership with the National Literacy Secretariat (NLS), for their support.
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For the Tutor:

Welcome to Skills for Jobs!

Getting and keeping an entry-level job can be a big challenge for an adult with low literacy, numeracy, and information technology skills. If English fluency is also low, the challenge increases. Even an entry-level job requires a complex set of workplace essential skills. Basic competency in speaking, listening, using numbers, handling documents, reading, and writing is assumed. Increasingly, some ability to use computers is also needed. Each job also requires the employee to be aware of the skills he has and to be aware of his skill limits.

SKILLS FOR JOBS was designed by instructors in the Adult Literacy Program at NorQuest College, Edmonton to help address these challenges. It will help you, the tutor, to identify the workplace essential skills that your student already has, increase his skill set, and develop his awareness of his own capabilities.

There are three parts to SKILLS FOR JOBS:

- **Job Numeracy**
- **Job Literacy**
- **Job Talk**

The instructor binder contains sequenced activities reflecting the following entry-level workplace settings from the Human Resources and Social Development Canada website.


| Babysitters, Nannies and Parents’ Helpers | NOC 6474 |
| Cashiers NOC                              | 6611     |
| Cleaners NOC                              | 666      |
| Early Childhood Educator Assistants       | NOC 4214 |
| Estheticians, Electrologists, etc.        | NOC 6482 |
| Food and Beverage Servers                | NOC 6453 |
| Kitchen Helpers and Line Cooks           | NOC 6641 |
| Material Handlers                         | NOC 7452 |
| Sewing Machine Operators                 | NOC 9451 |
| Taxicab Drivers                          | NOC 7413 |
| Visiting Homemakers, Housekeepers, etc.   | NOC 6471 |
These eleven workplace settings were chosen because they are filled by some of the graduates of our lowest Adult Basic Literacy class at NorQuest College. These graduates enter the workstream reading and writing very little, knowing very little formal math, and often still struggling with English as a second language. Increasingly at NorQuest, we have been preparing our students more specifically for this transition to work. Recognizing that time for formal education is short, we are trying to make each lesson in our Adult Literacy Program a step towards a specific job task. This is very much still a work in progress, but we have articulated a core set of tasks and assembled resources to support their development. We are happy to share this work in progress with you in the hopes that it helps you guide your adult learner on his own journey.
Welcome to Job Numeracy!

- Welcome to Job Numeracy, one of the three components in the SKILLS FOR JOBS program. From this electronic file you may print a Tutor Binder and a Student Binder to guide your student through 55 sequenced activities involving whole numbers.

- Your student will identify the skills he already has and add to his skill set. Even a student with little or no formal math training or reading skill may participate.

- Follow the skill sequence exactly because each skill depends on prior ones. **DO NOT SKIP!** An experienced student may complete several skills in one session. A new learner can take his time with each one.

- The activities are designed for one-on-one use, but feel free to adapt them for a group.

- A specific job setting is given for each activity.

- Each job setting involves some role play, with the tutor assuming the role of an experienced worker and the student acting as a trainee.

- A detailed script is provided for each activity. It is meant to give you, as tutor, a clear picture of the skill elements. Do not feel that you need to follow it word by word.

- In each script, vocabulary is underlined. You will help your student highlight this vocabulary in the Glossary in his student binder. Take time as you do so to follow his questions and interest. For definitions of math terms, you may wish to consult the online Maths Dictionary at [http://www.teachers.ash.org.au/jeather/](http://www.teachers.ash.org.au/jeather/) (see Website 11 page).

- **Each job task is completed successfully each time**, whether the student does it independently or needs your help.

- Guidelines are given for evaluating mastery, but tutor discretion is encouraged.

- Your student may have his own ways of handling numbers. Affirm these, but also encourage familiarity with the methods suggested here. We have tried to make these reflect common workplace expectations.

- There are follow-up learning and practice activities for a student who has not mastered the skill. **THESE ACTIVITIES ARE GIVEN ONLY AS SUGGESTED HELPS; USE THEM AS LITTLE OR AS MUCH AS SUITS THE LEARNING SITUATION.** Students who have mastered the skill may also enjoy these activities.

- There are enrichment activities for the student who has shown mastery. **AGAIN, USE THESE ONLY AS DESIRED.**

- Many learning and enrichment activities are online and interactive. Your student will be adding to his computer knowledge as he practises his numeracy.

- Following each activity, the student should highlight the mastered step on his Numeracy Skill Ladder. It will remind both him and you of the skills that he has mastered and the documents that he has used in doing the activity.
Embedded Workplace Essential Skills

The focus in this binder is on identifying and increasing numeracy skills. However, other workplace essential skill elements are also embedded. These will lead to incidental learning:

Document Use

Forms

- Inventory sheet
- School worksheet
- Cash sheet
- Store receipt
- Receipt blank
- Canadian cash

Signs

- Information
- Cash register display
- Taxi meter
- Menu

Labels

- Product
- Price tag

Lists

- Work output

Diagram

- Playground

Schedules

- Timesheets
Reading and Writing

- Instructions (recipe)
- Note (to co-worker)

Tool Use

- Calculator
- Digital clock
- Analog clock
- Kitchen timer
- Scrap paper
- Lined paper
- Pencil with eraser
- Pen
- Marker
- Highlighter
- Sticker

Oral Communication

- Role play
- Vocabulary discussion
- Job setting discussion

Computer Use

- Interactive websites for learning, practice, and enrichment
- Variety of keyboarding and mouse skills

Finding Information

- Glossary use
Activities

The activities are the heart of the binder. They tell you, the tutor, which skill is being evaluated, and suggest how to present it, evaluate it, and follow up.

Each activity is presented in a common format:

**Overview**
- Skill name and number
- Job setting
- Task set (possible sequence of steps to complete the task; new tasks will be in bold print. See next page for sample.)
- Documents used
- Tools needed
- Tutor preparation
- Checklist (evaluation of items on the task set)

**Tips**
- Retest suggestions
- Messages to read to the student at the end of the activity

**Script**
You may follow the script or just read it over to see how the activity is to proceed.
- Tutor script elements include:
  - Underlined new vocabulary
  - Tutor directions and responses

**Subskills and Resources**
Elements include:
- Suggested method for teaching the new skill element
- Resources for learning and practice (paper and online), to be used as desired
- Resources for enrichment and challenge (paper and online), to be use as desired

Additional pages are required for some activities:

**Illustrations**
- Use “as is” or modify according to the directions in the script.
- They are found on pages 187–218 towards the back of the binder. Photocopy as needed.
- Do not give to student to keep because these are test elements.

**Student Handout**
- These are found on pages 249 and 250. Photocopy as needed.
- Student may keep this in his binder.

THE STUDENT SHOULD DO ALL ACTIVITIES IN THE ORDER THEY ARE PRESENTED.
Sample Task Set

Job Setting
Stock taker: taking inventory

Task Set
- Read digit numbers (0-99)
- Read digit numbers out loud (one to three digits)

Documents
- Form (Inventory sheet)

Tools
- Pencil with eraser

Tutor Preparation
- Photocopy ILLUSTRATION A: Form (Inventory Sheet: read)
- Prepare list of underlined vocabulary from script page.

Checklist
Correct words? [ ]
Clear pronunciation? [ ]

Tips
- **Bold print** has two different purposes on these and all following skill pages. On the overview page at the beginning of each activity, bold print is used for a skill that is *new*. On the script page, bold print is used to show what the tutor *does*, rather than what he *says*.

To Retest
- Photocopy ILLUSTRATION B: Form (Inventory Sheet: blank) to reuse the job setting. Write numbers with up to 3 digits in the “May” column.

- You have shown that you can read digit numbers out loud. You may highlight Skill 1 on the NUMBERS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

- More practice with reading digit numbers out loud would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Supplies, Materials, and Resources Needed

(Assemble before beginning the program)

Access to photocopy facilities

Access to Internet (not necessary, but very desirable)

Tools:

- Pencil with eraser
- Eraser
- Highlighting pen
- Black marker
- Blank stickers (to be “price tags”)
- Yellow “Post-it” notes
- Scrap paper
- Basic calculator
- Donations jar
  - Large jar for collecting pennies for charity
  - “Donations Jar” printed on sticker attached to jar
- Donations envelope
  - Envelope for collecting cash for charity
  - Containing up to four of each cash denomination (real or play money) as directed
  - “Donations” printed on the front
- Cash box
  - Real cash box or partitioned shoebox
  - Containing up to ten of each denomination of Canadian currency (penny to hundred-dollar bill); real or play money, or a combination of both cash sets in order of ascending value from left to right
- Cash wallet
  - Real wallet with compartments for bills and coins
  - Up to four of each cash denomination (real or play money)
  - Bills/coins not in order
- Operating analog clock
- “Disabled” analog clock (for setting to one stationary time)
- Operating digital clock
- Kitchen timer
- Three-ring binder for the student
Contents of Student Binder

Welcome to the Student
Tutor reads to student to explain and motivate

Glossary
Alphabetical list of the underlined vocabulary from the tutor script pages
Student uses a marker to highlight vocabulary items as encountered in activities
Student writes or draws something to aid memory beside items new for him

Numeracy Skill Ladder
Five tiers:
1. Numbers
2. Counting
3. Number Operations
4. Money
5. Time
Each step dependent on step below
Student highlights steps as they are mastered

Student Handout
For study and reference

*Photocopy all items except the student handout and insert in three-ring binder for student before beginning program. Photocopy the student handout as needed as student proceeds through program.*

**THESE ARE THE ONLY PAGES TO BE GIVEN TO THE STUDENT. ALL OTHER PAGES SHOULD REMAIN WITH THE TUTOR TO KEEP TEST ITEMS SECURE.**
Getting Started

Prepare Tutor and Student Binders

- Print this electronic file. Up to page 186 may be double-sided. Pages 187 to 250 should be single-sided. Insert all pages in a three-ringed binder and add dividers for sections as indicated in the table of contents. This is your **Tutor Binder**.

- Reprint pages 223 to 248 (single-sided). Insert these pages in a three-ringed binder. This is the beginning of your **Student Binder**. Further pages will be added as you work through student activities.

Prepare to Teach

- Read pages 1 to 10 of the Tutor Binder (Introduction).
- Think through the first two or three student activities (pages 11–21).
- Explore the websites that are available in the subskills and resources section for the first two or three activities.
- Assemble supplies and arrange the work area to suit activities.

Meet Your Student for the First Time

- Read “Welcome to Job Numeracy!” (page 224, now in the student binder) with your student. Discuss his goals for working with you.

Working With Your Student

- Prepare to respond if your student is finding some skills too challenging. Be ready to point out the subskills and associated skills that he is doing well in each activity even if the main skill is coming slowly. Think how you will encourage him to take his time and enjoy learning.

- Prepare to respond if your student feels some skills are too easy. Be ready to reassure him that review is always good practice and that he is increasing his vocabulary, document literacy, and computer literacy in each activity even if the reading or writing skill is familiar to him.

- Bring your respect, optimism, and sense of humour.

- Bring your creativity, too. This program of activities is highly formatted and sequenced to provide a clear model. However, use your tutor instinct to adapt presentation and teaching methods for your particular student. You know best!
Finishing Up

It is possible that your student will finish all the activities in this program. It is equally possible that he will finish only some in the time that you have together. In either case, it will be important to finish by summarizing what he has done and reinforcing him for his accomplishments to date.

You will know best how to do this with your student. Looking at the Skill Ladder should provide a good basis for discussing what has been accomplished. On the Skill Ladder the student can see which skills he has mastered. At the same time, he can see which documents and job setting were involved in each skill. Hopefully that will help him to build a clearer picture of his skill set. He will also be able to see which skills on the ladder may not yet be complete.

Even if the student does finish all the activities in the program, he should be made aware that there is a lot more to learn in the world of job numeracy. Encourage him to be a lifelong learner. Share your own experiences to help him realize that in today's job market workers are always needing to learn more to keep up with changing skill demands.

If circumstances allow, you might investigate also exploring the Job Literacy and Job Talk components of SKILLS FOR JOBS. Your student's skill set would be strengthened by doing the activities in these related programs which share the same job settings and goals.
Numeracy Tier: Numbers

Skill 1: Read Digit Numbers

Job Setting
Stock taker: taking inventory

Task Set
• Read digit numbers out loud (one to three digits).

Documents
• Form (inventory sheet)

Tools
• Pencil with eraser

Tutor Preparation
• Photocopy ILLUSTRATION A: Form (Inventory Sheet: read).
• Prepare list of underlined vocabulary from script page.

Checklist
Correct words? □ ___________________________
Clear pronunciation? □ ___________________________

Tips
• Bold print has two different purposes on these and all following skill pages:
  On the overview page at the beginning of each activity, bold print is used for a skill
  that is new. On the script page, bold print is used to show what the tutor does, rather
  than what he says.

To Retest
• Photocopy ILLUSTRATION B: Form (Inventory Sheet: blank) to reuse the job
  setting. Write numbers with up to three digits in the “May” column.

☐ You have shown that you can read digit numbers out loud. You may highlight Skill 1 on the
  NUMBERS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with reading digit numbers out loud would be helpful. Let's look at some
  learning and practice activities. We will focus on (area of difficulty).
Today you will start the NUMBERS TIER of your skill ladder. This first activity is called “Read Digit Numbers.” We use 10 digits in our number system. They look like this.

Make vertical list of digits 0 to 9 for the student.

| 0 |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |

With these 10 digits, we can make all our numbers. In this activity, you will be reading digit numbers out loud. Reading out loud means that you read so that others can hear and understand.

Here is the job setting.
I work in the lumber department of a building supplies store, and you are my trainee. We are using an inventory sheet to keep track of how many building studs are in stock.

Here is the inventory sheet with the inventory information. You can see that someone has already counted the number of studs in stock at the end of the month of May.

Show ILLUSTRATION A with inventory sheet.
Discuss vocabulary and format of sheet.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to the job setting!
Look at the inventory sheet again.
The boss wants to know how many studs are in stock according to the May inventory. You will read the numbers to him out loud. Before you do this, you should read the numbers out loud to me for practice. Do you think this will be easy for you, or will you need some help?

(RESPONSE)

That’s fine. Each time we work together you will have a chance to practise the skills you have already. If you don’t have the skill, I can do the activity with you and then help you to learn it. Let’s give it a try.

If the student is able, have him read the numbers aloud. Affirm his correct readings.
If he makes errors, let him finish and then point them out.
If the student is unable to read alone, read for him.

Okay! That’s the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
New Numeracy Skill: Read Digits Numbers to 999 Out Loud

Learning/Practice Activities:
Tutor/Student

Skill: Read digit numbers to 999 out loud.
Tutor writes digits.
Student says numbers.

0–9
11–19
10, 20, 30, 40, 50, 60, 70, 80, 90
21–99
100, 200, 300, 400, 500, 600, 700, 800, 900
0–99

Learning/Practice Activities:
Website Interactive

Skill: Choose printed words to match digit numbers (1–50).
Website 1A
Enter address: http://www.aaaknow.com/
Click on “Numbers and Words 1–50.”
Scroll down to page 2.
Click on “Start” to see digit.
Click on button with corresponding word; if unable to read words, count forward by rows to find correct button.
See box below for feedback.

Skill: Choose printed words to match digit numbers (51–99).
Website 1B
Enter address: http://www.aaaknow.com/
Click on “Naming Numbers.”
Click on “Numbers and Words 51–99.”
Scroll down to page 2.
Click on “Start” to see digit.
Click on button with corresponding word; if unable to read words, count forward by rows to find correct button.
See box below for feedback.

Skill: Choose printed words to match digit numbers (0–999).
Website 4A
Enter address: http://www.dositey.com/
Click on “3–4 Math.”
Click on “Number Sense.”
Click on “Match three-digit numbers.”
Click on button with number in words (if unable to read words, tutor can read).
Click on matching digit number button to reveal picture.

Enrichment Activities:
Website Based

Skill: Choose printed words to match digits 1–99 (time limit).
Use Websites 1A and 1B as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Numbers

Skill 2: Write Digit Numbers

Job Setting
Material handler: taking inventory

Task Set
- Write digit numbers (up to three digits).

Documents
- Form (inventory sheet)

Tools
- Pencil with eraser
- Scrap paper

Tutor Preparation
- Photocopy ILLUSTRATION B: Form (Inventory Sheet: blank)
- Prepare piece of scrap paper with the following digit numbers in a vertical list:
  58, 80, 814, 288, 29, 18, 206, and 144. Do not show the scrap paper to the student unless directed to do so in the script.
- Prepare list of underlined vocabulary from script page.

Checklist
Numbers recorded correctly? □ __________________________
Good penmanship? □ __________________________

Tips
- If your student does not print the ten digits in a standard way, take time to correct this before moving to the next activity. He may have taught himself how to write the digits and needs to be shown the usual way of making each one. See learning and practice activities that apply.

To Retest
- Reuse the job setting. Dictate different numbers for the “June” column.

☐ You have shown that you can write digit numbers. You may highlight Skill 2 in the NUMBERS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with writing digit numbers would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Write Digit Numbers.” In the last activity, you showed that you could read digit numbers on an inventory sheet. In this activity, you will show that you can record, or write, the numbers on the sheet yourself.

Here is the job setting. It is similar to the last activity. I work in the building supplies store, and you are my trainee. We are working with the same inventory sheet as last time, keeping track of stock in the lumber department. We have the May numbers for studs on hand. I have them here on my scrap paper. I will read them to you so that you can record them on the inventory sheet.

Before continuing, let’s take a few moments to highlight vocabulary in your glossary. Help the student highlight each of the underlined vocabulary items above. Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to the job setting!

Here is the inventory sheet again. You will be writing the May numbers in this column. Show ILLUSTRATION B with Inventory Sheet. Point to May column.

I will read the numbers to you. Are you ready to record them in digits? (RESPONSE) Dictate the numbers from your scrap paper to the student. There is one number for each type of stud.

If the student is able, have him write alone. If he asks for help, provide it.

If he makes errors unknowingly, let him finish and then compare with the numbers on your scrap paper.

If the student is unable to write, reverse roles. Have him read the numbers aloud from your scrap paper while you write them in.

Okay! That's the end of this job activity! Now give me a minute to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 2

New Numeracy Skill: Write Digit Numbers up to 1,000

Learning/Practice Activities:
Tutor/Student

Skill: Hear numbers 0–1,000; write in digits.
Tutor says number.
Student writes digits.
0–9
11–19
10, 20, 30, 40, 50, 60, 70, 80, 90
21–99
100, 200, 300, 400, 500, 600, 700, 800, 900
0–999
1,000

Learning/Practice Activities:
Website Interactive

Skill: Print digit symbols 0 to 9.
Website 14A
Enter address: http://www.handwritingforkids.com/
Click on “Enter.”
Click on “Manuscript.”
Click on “Alphabets and Numbers.”
Click on “Numbers Tracing Guide.”
Print as worksheet.

Skill: Print digit symbols 0–9
Website 14B
Enter address: http://www.handwritingforkids.com/
Click on “Enter.”
Click on “Manuscript.”
Click on “Alphabets and Numbers.”
Click on “Animation: Numbers.”
Move mouse over each digit to print the digit.

Skill: Read number words (zero to nine); type digits.
Website 6A
Enter address: http://www.funbrain.com/
Click on “All Games.”
Click on “Cookie Dough.”
Click on “Spell Numbers.”
Click on “0–10.”
Type digits to match word (if unable to read word, tutor reads).
Click on “Sign it.”
Skill: Read number words (ten to one hundred); type digits.

**Website 6B**

Enter address: [http://www.funbrain.com/](http://www.funbrain.com/)

Click on “All Games.”

Click on “Cookie Dough.”

Click on “Spell Numbers.”

Click on “10–100.”

Type digits to match words (if unable to read words, tutor reads).

Click on “Sign it.”

Skill: Read number words for (one hundred to one thousand); write digits.

**Website 6C**

Enter address: [http://www.funbrain.com/](http://www.funbrain.com/)

Click on “All Games.”

Click on “Cookie Dough”

Click on “Spell Numbers.”

Click on “0–1000.”

Type digits to match words (if unable to read words, tutor reads).

Click on “Sign it.”
Numeracy Tier: Numbers

Skill 3: Compare Numbers

Job Setting
Material handler: comparing inventory numbers

Task Set
- Read digit numbers (0 to 999).
- See and compare size of numbers.
- See, hear, and compare size of numbers.

Documents
- Form (inventory sheet)

Tools
- Scrap paper
- Yellow highlighter

Tutor Preparation
- Photocopy ILLUSTRATION C: Form (Inventory Sheet: compare).
- Prepare list of underlined vocabulary from script page.

Checklist
Numbers read aloud correctly? □ _____________________________
Numbers compared correctly?
See only? □ _____________________________
See and hear? □ _____________________________

Tips
- The student may have trouble comparing an oral number with a written one, especially if he has an ESL background.

To Retest
- Reuse the job setting. Pose different comparison questions.

☐ You have shown that you can compare numbers. You may highlight Skill 3 in the NUMBERS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with comparing numbers would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Compare Numbers.” You have already shown that you can read and write digit numbers on an inventory sheet. In this activity, you will tell which numbers are bigger and which are smaller. You will also tell which numbers show more and which show less.

Here is the job setting.
Again, we are working in the lumber department, and you are my trainee. We are working with the same inventory sheet. It's June, and the boss wants us to make some comparisons from the figures on this sheet. Before we speak to him, we want to look at the sheet together to make sure that we understand it. He may want to know which items are in good supply and which are running out.

Before continuing, let’s take a few moments to highlight vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to the job setting!
Here is the inventory sheet again.

Show ILLUSTRATION A with Inventory Sheet.

Please read the counts for June out loud to me. (RESPONSE)

Point to the right column if necessary.

Now let's make a few practice comparisons from the June column before we talk to the boss. Which number is the biggest in the column? (Response)

If the student reads the right number, affirm it and discuss with him which item is in greatest supply.
If the student reads the wrong number, discuss the right answer and the item.

And which number is the smallest in June? (RESPONSE)

Proceed as above.

Now look at the 2×4 spruce studs. Do we have more eight-foot or twelve-foot studs on hand right now? (RESPONSE)

Guide the student to the right rows and column if necessary.
If the student answers correctly, affirm his answer.
If the student answers incorrectly, discuss the right answer.

Now one final question before we go to meet our boss. Look at the 2×6 spruce studs in the eight-foot lengths. You can highlight them with this yellow highlighting pen.

Give yellow highlighting pen.

Last year in June, we had two hundred and sixty 2×6 spruce studs on hand. Was that more or less than we have on hand right now? (RESPONSE)

Affirm a correct answer.
If the student has difficulty, have him write the new number (260) on scrap paper and compare it with the June count on the inventory sheet. Affirm a right response or guide him to the right answer.

Okay! That's the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 3

New Numeracy Skill: Compare Numbers up to 1,000

Learning/Practice Activities:
Tutor/Student

Skill: Compare number heard with digit number (0 to 1,000).
Tutor says one number and writes another number.
Student tells if the number heard is greater, less, or equal to number written.
Compare sets of one-digit numbers.
Compare sets of one- and two-digit numbers.
Compare sets of one-, two-, and three-digit numbers.

Learning/Practice Activities:
Website Interactive

Skill: Compare two pairs of digit numbers (0 to 10).
Website 1C
Enter address: http://www.aaaknow.com/
Click on “Comparing.”
Click on “Comparing One-Digit Numbers.”
Scroll down to page 2.
Click on button (more than/the same as/less than) to compare digit numbers.

Skill: Compare two pairs of digit numbers (0 to 100).
Website 1D
Enter address: http://www.aaaknow.com/
Click on “Comparing.”
Click on “Comparing Two-Digit Numbers.”
Scroll down to page 2.
Click on button (more than/the same as/less than) to compare digit numbers.

Skill: Compare two pairs of digit numbers (0 to 1,000).
Website 1E
Enter address: http://www.aaaknow.com/
Click on “Comparing.”
Click on “Comparing Three-Digit Numbers.”
Scroll down to page 2.
Click on button (more than/the same as/less than) to compare digit numbers.
Challenge Activities:
Website Interactive

Skill: Order one-digit pairs of digit numbers ascending.

Website 1F
Enter address: http://www.aaaknow.com/
Click on “Comparing.”
Click on “Ordering One-Digit Numbers Ascending.”
Scroll down to page 2.
Click on “Start” button.
Compare digit number in box with digit numbers below.
Click on button to left, between, or to right.

Skill: Order one-digit pairs of digit numbers descending.

Website 1G
Enter address: http://www.aaaknow.com/
Click on “Ordering One-Digit Numbers Descending.”
Scroll down to page 2.
Compare digit number in box to digit numbers below.
Click on button to show where to insert digit number in sequence.

Skill: Order one-digit pairs of digit numbers ascending and descending.

Website 1H
Enter address: http://www.aaaknow.com/
Click on “Ordering One-Digit Numbers Ascending and Descending.”
Scroll down to page 2.
Determine if digit numbers below are ascending or descending.
Compare digit number in box to digit numbers below.
Click on boxes to left, between, or to right.

Skill: Order two-digit pairs of digit numbers ascending and descending.

Website 1I
Enter address: http://www.aaaknow.com/
Click on “Ordering Two-Digit Numbers Ascending and Descending.”
Scroll down to page 2.
Determine if digit numbers below are ascending or descending.
Compare digit number in box to digit numbers below.
Click on box to left, between, or to right.

Skill: Order three-digit pairs of digit numbers descending.

Website 1J
Enter address: http://www.aaaknow.com/
Click on “Ordering Three-Digit Numbers Ascending and Descending.”
Scroll down to page 2.
Determine if digit numbers below are ascending or descending.
Compare digit number in box to digit numbers below.
Click on box to left, between, or to right.
Numeracy Tier: Numbers

Skill 4: Print Numbers in Words

Job Setting
Nanny: helping with homework

Task Set
- Read digit numbers (up to 999) out loud.
- Print words to match.

Documents
- Form (school worksheet)

Tools
- Pencil with eraser

Tutor Preparation
- Make photocopy of ILLUSTRATION D: form (School Worksheet: Numbers at Our School).
- Prepare list of underlined vocabulary from script page.
- Photocopy STUDENT HANDOUT 1: Number Words.

Checklist
Numbers read aloud correctly? ☐
Numbers written correctly?
Letters legible? ☐
Correct words? ☐
Correct spelling? ☐
Correct letters? ☐
Hyphens used? ☐

Tips
- The student may know the correct words to write, but spell incorrectly. Do the “more practice” activities and stress that good spelling of numbers is very important for clear communication. However, if after some practice, the student’s spelling of numbers is still weak, move on to the next skill. Just make sure that he has been given STUDENT HANDOUT 1, and that he can find it when he needs it.

To Retest
- Reuse the job setting.

☐ You have shown that you can print numbers in words. You may highlight Skill 4 on your Skill Ladder. This completes the NUMBERS TIER. Well done! Now go to the enrichment activities, if available.
☐ More practice with printing numbers in words would be helpful. Let’s look at some learning and practice activities. We will focus on (area of difficulty).
You have shown that you can read and write digit numbers. Now you will write these numbers in words. The name of this activity is “Print Numbers in Words.”

Here is the job setting.
I work as nanny, and you are my trainee. We are helping our child, Melvin, with his number homework. On his school worksheet is a list of digit numbers. Melvin must print each of the numbers in words. This is a new skill for him. The teacher has agreed to a plan to help him. She has sent home an extra school worksheet so that we can print the numbers first. Then Melvin can copy our answers.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to the job setting!
Here is our copy of the worksheet that must be done for homework.

Show ILLUSTRATION with School Worksheet.

Read the digit numbers out loud to me, please. (RESPONSE).

Now, can you print the numbers in words for our student by yourself, or will you need help? (RESPONSE)

If the student is able, let him print alone. If he asks for help, provide it. If he makes errors unknowingly, let him finish. Then point out the errors to him.

If the student is unable to print the numbers, do them for him.

Before we leave this activity, here is a handout of number words for you. Please put it in your student binder. (RESPONSE)

Give STUDENT HANDOUT 1: Number Words

Okay! That's the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 4

New Numeracy Skill: Print Numbers up to 1,000 in Words

Learning/Practice Activities:
Tutor/Student

Skill: Basic number words
Tutor tells student to get out STUDENT HANDOUT 1: Number Words from binder.
Student follows instructions on handout.

Skill: Print numbers up to 1,000 in words.
Tutor prints digit numbers.
Student prints numbers in words.
0–9
10–9
11–19
10, 20, 30, 40, 50, 60, 70, 80, 90
21–99
100, 200, 300, 400, 500, 600, 700, 800, 900
0–99
1,000

Learning/Practice Activities:
Website Interactive

Skill: Read digit number 0 to 10; type number word.
Website 6D
Enter address: http://www.funbrain.com/
Click on “All Games.”
Click on “Cookie Dough.”
Click on “Spell Numbers.”
Click on “0–10.”
Type word to match digit number.
Click on “Sign it.”

Skill: Read digit number 0 to 100; type number word.
Website 6E
Enter address: http://www.funbrain.com/
Click on “All Games.”
Click on “Cookie Dough.”
Click on “Spell Numbers.”
Click on “0–100.”
Type word to match digit number.
Click on “Sign it.”

Skill: Read digit number 0 to 1000; type number word.
Website 6F
Enter address: http://www.funbrain.com/
Click on “All Games.”
Click on “Cookie Dough.”
Click on “Spell Numbers.”
Click on “0–1000.”
Type word to match digit number.
Click on “Sign it.”
Numeracy Tier: Counting

Skill 5: Count by Ones

Job Setting
Daycare worker: teaching children about counting

Task Set
• Count pennies out loud from zero to 100 by ones.

Documents
• None

Tools
• None

Tutor Preparation
• Put out donations jar with more than 100 pennies.
• Prepare to tell when you count in your daily life.
• Prepare list of underlined vocabulary from script page.

Checklist
Pennies counted out correctly? ☐ ______________________

Tips
• The student may be very skilled in counting, but not in counting out loud in English. Be sensitive to this and explain that this activity relies on oral counting.

To Retest
• Reuse the job setting.

☐ You have shown that you can count by ones. You may highlight Skill 5 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting by ones would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
You have completed the NUMBERS TIER of JOB NUMERACY. Now you will start moving up the COUNTING TIER of your skill ladder. This first activity is called “Count by Ones.”

Often in our daily life and on the job we have to count things out. Mothers who are making lunches for several kids know that they must count out cookies carefully for each lunch bag, don't they? If they don't count out carefully, the kids will say they are being unfair! Let's think of some other times when we need to count things out. (DIALOGUE)

Here is the job setting.
I am a daycare worker and you are my trainee. The children are collecting pennies to give to charity. The pennies are being kept in this donations jar.

Show the donations jar.

As the children see the pennies being counted, they are learning to give their money to help other people, and at the same time, they are also learning about numbers.

Today the children have asked us to count out 100 pennies from the jar. We will count out loud.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should draw or write something to aid memory if needed.

Now let’s get back to the donations jar! We need to count out 100 pennies for the children like this.

Dump out the pennies and demonstrate counting a few pennies by ones aloud, moving each penny aside as it is counted. Then return the counted pennies to the whole pile.

Now that you have the idea, can you count out 100 pennies for the children? (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by ones.

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
Subskills and Resources: Skill 5

New Numeracy Skill: Count Objects Out Loud from Zero to 100 by Ones

Learning/Practice Activities:
Tutor/Student

Skill: Count out objects by ones.
Tutor provides concrete objects: pennies, nails, etc.
Student touches and counts objects by ones.
0–9
0–20
21–100

Learning/Practice Activities:
Website Interactive

Skill: Count objects by ones to 30 and match with digit number
Website 11A
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Bilambil Primary School.”
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths.”
Click on “Level A.”
Click on “Count Crayfish.”
Click on addition sign to see objects and digit numbers increase by ones.

Skill: Count objects by ones to 100 and match with digit number
Website 11B
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Bilambil Primary School.”
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths.”
Click on “Level B.”
Click on “More Counting.”
Click on a jar.
Click on a digit number to show total number of objects.
Numeracy Tier: Counting

Skill 6: Skip-Count Objects by Twos

Job Setting
Daycare worker: teaching children about counting

Task Set
- Count out 100 pennies by ones.
- **Skip-count 100 pennies by twos.**

Documents
- None

Tools
- None

Tutor Preparation
- Put out donations jar with more than 100 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist
- Pennies counted out by ones correctly? □ ________________
- **Correct skip-counting by twos?** □ ________________

Tips
- None

To Retest
- Reuse the job setting.

☐ You have shown that you can skip-count objects by twos. You may highlight Skill 6 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with skip-counting objects by twos would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In this activity, you will again be counting to 100, but this time you will count objects two at a time. The title of the activity is “Skip-Count Objects by Twos.”

Here is the job setting. It's the same as last time. I am a daycare worker and you are my trainee. The children are collecting pennies to give to charity as they learn about numbers.

Today we will start by counting out 100 pennies by ones again for the children. Then we will show them that we can count out the same number by twos.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should draw or write something to aid memory if needed.

Now let’s get back to the job setting!

Here is the jar with the pennies. Count them out by ones first. (RESPONSE)

Give donations jar.
Help student, if needed, to count out 100 pennies from the jar.

Now let's count these hundred pennies out loud for the kids by twos. Do it like this.

Spread out the 100 pennies and demonstrate for a moment moving pennies aside in sets of two as you skip-count by two. Then return the counted pennies to the whole pile.

Now that you have the idea, can you do it yourself? (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by twos.

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
Subskills and Resources: Skill 6

New Numeracy Skill: Count Objects Out Loud from Zero to One Hundred by Twos

Learning/Practice Activities:
Tutor/Student

Skill: Count objects out loud from zero to 100.
Tutor provides concrete objects: pennies, nails etc. (any even number up to 20).
Student touches and counts objects by twos.

Learning/Practice Activities:
Website Interactive

Skill: Skip-count objects by twos to 50 and match with digit number.
Website 11C,
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Bilambil Primary School.”
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths.”
Click on “Level B.”
Click on “Count by 2, 5, 10” (on “Number” row).
Click on “by 2’s.”
Click on addition sign to see objects and digit numbers increase by twos.

Skill: Skip-count objects by twos to 50 and match with digit number
Website 13A,
Enter address: http://www.learningplanet.com/
Click on “The Counting Game”

Skill: Count out loud and colour in skip-counting sequence by twos to 100.
Website 16
Enter address: http://apples4theteacher.com/
Click on “Math.”
Click on “Interactive 100 Number Charts.”
Click on “1–100.”
Click on colour dot to choose colour of “crayon.”
Click on multiples of 2 to count out and colour simultaneously.
Numeracy Tier: Counting

Skill 7: Skip-Count Objects by Fives

Job Setting
Daycare worker: teaching children about counting

Task Set
- Count out 100 pennies by twos.
- Make sets of five pennies.
- Skip-count sets of five aloud to 100.

Documents
- None

Tools
- Calculator

Tutor Preparation
- Put out donations jar with more than 100 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist

Pennies counted out by twos correctly? □ ______________________

Counting out by fives
Correct sets? □ ______________________
Correct count? □ ______________________
Correct words? □ ______________________

Tips
- None

To Retest
- Reuse the job setting.

☐ You have shown that you can skip-count objects by fives. You may highlight Skill 7 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with skip-counting objects by fives would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In this activity, we will continue the skill of counting out loud, but this time we will skip-count by fives. Skip-counting by fives is very helpful when handling money. It also makes telling time very easy. This new activity is called “Skip-count Objects by Fives.”

Here is the job setting. It's the same as last time
I am a daycare worker and you are my trainee. Today we will count out 100 pennies by twos for the children. Then we will show them that we can count out the same number by fives. To get them ready for counting, we will have to put them in sets of five each. Then we can see how many there are altogether by skip-counting them.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now back to the job setting!
Here is the jar with the pennies. Count out 100 by twos first. (RESPONSE)

Now put the same pennies in sets of fives for skip-counting. (RESPONSE)

Now we'll count the five-penny sets like this.
Demonstrate counting a few sets aloud by fives, touching each set as you go.

Okay. Now that you have the idea, count the pennies by fives if you can. (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by fives.

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
New Numeracy Skill:  Count Objects Out Loud from Zero to 100 by Fives

Learning/Practice Activities:
Tutor/Student

Skill: Count objects out loud from 0 to 100 by fives.
Tutor provides concrete objects: pennies, nails etc. (any multiple of five).
Student touches and counts objects by five.

Learning/Practice Activities:
Website Interactive

Skill: Skip-count objects by fives to 100 and match with digit number.
Website 11C
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Bilambil Primary School.”
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths. “
Click on “Level B.”
Click on “Count by 2, 5, 10” (on “Number” row).
Click on “by 5’s.”
Click on addition sign to see objects and digit numbers increase by fives.

Skill: Type in next digit number when counting by fives from zero.
Website 1L
Enter address: http://www.aaaknow.com/
Click on “Counting.”
Click on “Patterns When Counting by Fives.”
Scroll down to page 2.
Click on “Start Count up by Fives.”
Type digit number to match multiple of five.
Click on “Check” button.

Skill: Count out loud and colour in skip-counting sequence by fives to 100.
Website 16
Enter address: http://apples4theteacher.com/
Click on “Math.”
Click on “Interactive 100 Number Charts.”
Click on “1–100.”
Click on colour dot to choose colour of “crayon.”
Click on multiples of 5 to count out and colour simultaneously.

Enrichment Activities:
Website Interactive

Skill: Type in next digit number when counting by fives from zero (time limit).
Use Website 1L as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Counting

Skill 8: Multiply on a Calculator

Job Setting
Daycare worker: checking donation total

Task Set
- Skip-count pennies by twos to find total.
- Check penny count by multiplying on calculator.

Documents
- None

Tools
- Scrap paper
- Pencil with eraser
- Calculator

Tutor Preparation
- Put out donations jar with 85 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist

<table>
<thead>
<tr>
<th>Task</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count total correct?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent calculator use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power on?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentence entered correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Answer read correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power off?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tips
- None

To Retest
- Reuse the job setting. Put in a different number of pennies in the jar (multiple of five).

☐ You have shown that you can multiply on a calculator. You may highlight Skill 8 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with multiplying on a calculator would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
You have been finding totals by skip-counting. That's a great skill to have! However, sometimes you may need to check your count total by using a calculator. Do you have much experience using a calculator? (RESPONSE)

To check a count total, you can add or multiply on a calculator. If you have been counting equal sets of the same number, it is easier to multiply. This activity is called “Multiply on a Calculator.”

The job setting is similar to the last one. I am a daycare worker and you are my trainee, and we are counting the pennies in the donations jar. However, this time we will also check our total by multiplying on the calculator. The children often notice their parents using calculators. They will be interested to see how they work.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to the job setting!
Here is the donations jar. Put the pennies in sets of five. (RESPONSE)

Put out donations jar with contents.

Now skip-count the sets to get the total.

Help if needed.

That's fine. Now leave the pennies in sets, and write your total on this piece of scrap paper. (RESPONSE)

Give scrap paper and pencil with eraser.

Now we can check the penny count by multiplying on the calculator. Would you like to try this yourself, or would you like help? (RESPONSE)

If the student wants to proceed independently, let him do so. Ask him to read the answer from the calculator display when finished. It should match the number he has written on his piece of scrap paper.

If the student does not know how to proceed, or proceeds incorrectly, demonstrate the steps in entering the calculator sentence:

Turn calculator on.

Enter number of pennies in each set. (5)
Enter multiplication sign.

Count number of sets. (17)
Enter number of sets.
Enter equal sign.

Read answer from calculator display.
Check with answer on scrap paper.

Turn calculator off.

Okay! That's the end of this job activity.

Now give me a minute to make my notes and we'll see what's next.
Subskills and Resources: Skill 8

**New Numeracy Skill: Multiplying Equal Sets on a Calculator to Check a Count**

**Learning/Practice Activities:**

*Tutor/Student*

**Skill:** Put objects in sets of two, skip-count and multiply on calculator to check total.

- Tutor provides even number of concrete objects: nails, buttons etc.
- Student puts objects into sets of two.
- Student turns calculator on.
  - Student counts number of sets and enters number in calculator.
- Student enters multiplication sign.
- Student enters number of items in each set (2).
- Student enters equal sign.
- Student reads answer from calculator display.
- Student skip-counts sets to check calculator total.
  
Student turns calculator off.
Numeracy Tier: Counting

Skill 9: Count On by Twos

Job Setting
Daycare worker: teaching children about counting

Task Set
- Resume count of pennies out loud by twos.
- Write new running total as digit number.
- Write new running total in words.

Documents
- Sign (Information)

Tools
- Black marker

Tutor Preparation
- Have ready an even number of pennies.
- Photocopy ILLUSTRATION E: Sign (Information: Donations; demo).
- Photocopy ILLUSTRATION F: Sign (Information: Donations: blank.)
- Prepare list of underlined vocabulary from script page.

Checklist

New total correct? □ _______________________
Digit number written correctly? □ _______________________
Words written correctly? □ _______________________

Tips
- The student must count on from a number more than 100 in this activity. This skill may need additional explanation and practice.
- Your student may want to practise writing the numbers on scrap paper before using the marker.

To Retest
- Reuse the job setting. Vary the number of pennies (multiple of two) and the starting count.

☐ You have shown that you can count on by twos. You may highlight Skill 9 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting on by twos would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In this activity, you will skip-count by twos again, but this time you won't start at zero. Instead you will start your count at another number. The title of the activity is “Count On by Twos.”

Here is the job setting.
Again, I am a daycare worker, you are my trainee, and you are teaching the children about numbers as you count donated pennies. Every day you make a new donations sign to show how many pennies that have been collected to date.

Here is the donations sign from yesterday.

Show ILLUSTRATION E with donations sign.

Discuss.

Today some more pennies have been brought in, and you are going to add them to yesterday's total to get the new running total.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to the job!
As you can see, yesterday’s penny total was 154. Now here are the new pennies from Susie's mom.

Spread new pennies (even number) out on the table.

Count on by twos from 154 to find the new running total. (RESPONSE)
If the student is able, have him count on alone to the total.

If he starts counting and runs into difficulty, or if he is unable to get started, count with him until he is able to continue himself. Show him how to pull aside two pennies at a time as he counts.

Fine! Let's finish this activity by writing the new running total on today's sign.

Show ILLUSTRATION F with Donations Sign.
Write the new total first as a digit number. (RESPONSE)
Now write it in words. (RESPONSE)

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
New Numeracy Skill: Resume Count of Objects Out Loud by Twos

Learning/Practice Activities:
Tutor/Student

Skill: Resume count of objects out loud by twos (less than 100).
- Tutor provides concrete objects: pennies, nails etc. (even number less than 50).
- Student puts objects into sets of two.
- Tutor gives last running count total (even number less than 50).
- Student touches sets and counts on by twos.

Skill: Resume count of objects out loud by twos (more than 100).
- Tutor provides even number of concrete objects: pennies, nails etc.
- Student puts objects into sets of two.
- Tutor gives last running count total (even number more than 100).
- Student touches sets and counts on by twos.

Learning/Practice Activities:
Website Interactive

Skill: Skip-count objects by twos and count on by twos.
Website 13A
- Enter address: http://www.learningplanet.com/
- Click on “The Counting Game.”
- Click on “Play.”
- Click on “2.”
- Click on digit numbers to continue counting by twos.

Skill: Count on by twos as you colour in skip-counting sequence to 100.
Website 16
- Enter address: http://apples4theteacher.com/
- Click on “Math.”
- Click on “Interactive 100 Number Charts.”
- Click on “50–149.”
- Click on colour dot to choose colour of “crayon.”
- Click on multiples of 2 to count on and colour simultaneously.

Skill: Count on by twos as you colour in skip-counting sequence to 100.
Website 16
- Enter address: http://apples4theteacher.com/
- Click on “Math.”
- Click on “Interactive 100 Number Charts.”
- Click on “180–279.”
- Click on colour dot to choose colour of “crayon.”
- Click on multiples of 2 to count on and colour simultaneously.
Numeracy Tier: Counting

Skill 10: Count On by Fives

Job Setting
Daycare worker: teaching children about counting

Task Set
• Resume count of pennies out loud by fives.
• Write new running total as digit number.
• Write new running total in words.

Documents
• Sign (Information)

Tools
• Marker

Tutor Preparation
• Have pennies ready (multiple of five).
• Photocopy ILLUSTRATION F: Sign (Information: Donations).
• Prepare list of underlined vocabulary from script page.

Checklist

- New total said correctly? □ _________________
- Digit number written correctly? □ _________________
- Words written correctly? □ _________________

Tips
• Your student may want to practise writing the numbers on scrap paper before using the marker

To Retest
• Reuse the job setting. Vary the number of pennies (multiple of five) and the starting count.

☐ You have shown that you can count on by fives. You may highlight Skill 10 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting on by fives would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Count On by Fives.”

Again, I am a daycare worker, you are my trainee, and you are teaching the children about numbers as you count the pennies in the donations jar. Again you will be adding new pennies to the old total to find the new running total. Then you will make an updated donations sign.

Show ILLUSTRATION F with donations sign.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should draw or write something to aid memory if needed.

Now let’s get back to counting the pennies!
Last day's total was 185.
Here are the new pennies from today.

Spread pennies (multiple of five) on table.

Put the new pennies in sets of five for counting. (RESPONSE)

That's fine. Now you can skip-count on from 185 by fives to add in the new pennies. (RESPONSE)

If the student is able, have him count on alone to the total.

If he starts counting and runs into difficulty, or if he is unable to get started, count with him until he is able to continue himself.

Fine! Let's finish this activity by writing the new running total on the sign for the wall.
Write the new total first as a digit number. (RESPONSE)
Now write it in words. (RESPONSE)

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
Subskills and Resources: Skill 10

**New Numeracy Skill: Resume Count of Objects Out Loud by Fives**

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Resume count of objects out loud by fives (less than 100).**
- Tutor provides concrete objects: pennies, nails etc. (multiple of five less than 50).
- Student puts objects into sets of fives.
  - Tutor gives last running count total (multiple of five less than 100).
  - Student touches sets and counts on by fives.

**Skill: Resume count of objects out loud by fives (more than 100).**
- Tutor provides concrete objects: pennies, nails etc. (multiple of five).
- Student puts objects into sets of fives.
  - Tutor gives last running count total (multiple of five more than 100).
  - Student touches sets and counts on by fives.

**Learning/Practice Activities:**

**Website Interactive**

**Skill: Skip-count objects by fives and count on by fives.**

**Website 13B**

Enter address: [http://www.learningplanet.com/](http://www.learningplanet.com/)

Click on “The Counting Game.”

Click on “Play”

Click on “5”

Click on digit numbers to continue counting by fives

**Skill: Skip-count objects by fives and count on by fives**

**Website 13A,**

Enter address: [http://www.learningplanet.com/](http://www.learningplanet.com/)

Click on “The Counting Game”

Click on “Play”

Click on “2”

Click on digit numbers to continue counting by twos
Numeracy Tier: Counting

Skill 11: Skip-Count Objects by Tens

Job Setting
Daycare worker: teaching children about counting

Task Set
- Count out 100 pennies by fives.
- Make sets of ten pennies.
- Skip-count sets of ten aloud to 100.
- Check skip-count by multiplying on calculator.

Documents
- None

Tools
- Calculator

Tutor Preparation
- Put out donations jar with more than 100 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist
- Pennies counted out by fives correctly? □ __________________________
- Counting out loud by tens
  - Correct sets? □ __________________________
  - Correct count? □ __________________________
  - Correct words? □ __________________________

- Calculator multiplication correct? □ __________________________

Tips
- None

To Retest
- Reuse the job setting.

☐ You have shown that you can skip-count objects by tens. You may highlight Skill 11 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with skip-counting objects by tens would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In this activity, we will continue the skill of counting out loud, but this time we will skip-count out loud by tens. Skip-counting by tens is a great help when working with money and with time. This activity is called “Skip-Count by Tens.”

Here is the same daycare job setting again.

Here is the jar with the pennies. Count out 100 by fives first. (RESPONSE)

Now let's put these same hundred pennies back together again and then put them in sets of tens for counting. (RESPONSE)

Now we'll skip-count the ten-penny sets like this.

Demonstrate counting three sets aloud by ten touching each set as you go.

Okay. Now that you have the idea, skip-count the pennies by ten if you can. (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by tens.

Finally, let's check the skip-count total by multiplying on the calculator. (RESPONSE Prompt if needed.

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
Subskills and Resources: Skill 11

New Numeracy Skill: Count Objects Out Loud from Zero to 100 by Tens

Learning/Practice Activities:
Tutor/Student
Skill: Count objects out loud from zero to 100 by tens.
Tutor provides concrete objects: pennies, nails etc. (multiple of ten up to 100).
Student touches and counts objects by tens.

Learning/Practice Activities:
Website Interactive
Skill: Skip-count objects by tens to 100 and match with digit number.
Website 11C
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths.”
Click on “Level B.”
Click on “Count by 2, 5, 10” (on “Number” row).
Click on “by 10s.”
Click on addition sign to see objects and digit numbers increase by tens.

Skill: Type in next digit number when counting by tens from zero.
Website 1M
Enter address: http://www.aaaknow.com/
Click on “Counting.”
Click on “Counting by Tens.”
Click on “Patterns When Counting by Tens.”
Scroll down to page 2.
Click on “Start Count up by Tens.”
Type digit number to match multiple of ten.
Click on “Check” button.

Skill: Count out loud and colour in skip-counting sequence from 10 to 1000.
Website 16
Enter address: http://apples4theteacher.com/
Click on “Math.”
Click on “Interactive 100 Number Charts.”
Click on “10–1000.”
Click on colour dot to choose colour of “crayon.”
Click on multiples of 10 to count out and colour simultaneously.

Enrichment Activities:
Website Interactive
Skill: Type in next digit number when counting by tens from zero (time limit).
Use Website 1M as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start”
Numeracy Tier: Counting

Skill 12: Count On by Tens

Job Setting
Daycare worker: teaching children about counting

Task Set
- Resume count of pennies out loud by tens.
- Write new running total as digit number.
- Write new running total in words.

Documents
- Sign (Information)

Tools
- Marker

Tutor Preparation
- Have ready pennies (multiple of 10).
- Photocopy ILLUSTRATION F: Sign (Information: Donations).
- Prepare list of underlined vocabulary from script page.

Checklist
- New total said correctly? □ _________________
- Digit number written correctly? □ _________________
- Words written correctly? □ _________________

Tips
- Your student may want to practise writing the numbers on scrap paper before using the marker.

To Retest
- Reuse the job setting. Vary the number of pennies (multiple of pennies) and the starting count.

☐ You have shown that you can count on by tens. You may highlight Skill 12 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting on by tens would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Count On by Tens.” Again, I am a daycare worker, you are my trainee, and you are going to add on pennies to the old count to get the new running total.

Here are the new pennies. Put them in sets of ten for counting. (RESPONSE)

Spread the pennies (multiple of 10) on the table.

The last count was 230. Skip-count on by tens to find the new total. (RESPONSE)

If the student is able, have him count on alone to the total.

If he starts counting and runs into difficulty, or if he is unable to get started, count with him until he is able to continue himself.

Fine! Let's finish this activity by writing the new running total on the sign for the wall.

Show ILLUSTRATION F with donations sign.

Write the new total first as a digit number. (RESPONSE)
Now write it in words. (RESPONSE)

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.
Subskills and Resources: Skill 12

New Numeracy Skill: Resume Count of Objects Out Loud by Tens

Learning/Practice Activities:
Tutor/Student

Skill: Resume count of objects out loud by tens (less than 100).
  Tutor provides concrete objects: pennies, nails, etc. (multiple of 10 less than 50).
  Student puts objects into sets of tens.
  Tutor gives last running count total (multiple of 10 less than 50).
  Student touches sets and counts on by tens.

Skill: Resume count of objects out loud by tens (more than 100).
  Tutor provides concrete objects: pennies, nails, etc. (multiple of 10).
  Student puts objects into sets of tens.
  Tutor gives last running count total (multiple of 10 more than 100).
  Student touches sets and counts on by tens.
Numeracy Tier: Counting

Skill 13: Skip-Count Objects by Twenties

Job Setting
Daycare worker: teaching children about counting

Task Set
- Count out 100 pennies by tens.
- Make sets of 20 pennies.
- Skip-count sets of twenties aloud to 100.
- Check skip-count by multiplying on calculator.

Documents
- None

Tools
- Calculator

Tutor Preparation
- Put out donations jar with more than 100 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist

Pennies counted out by ten correctly?  □ ______________________
Counting out by twenties
Correct sets?  □ ______________________
Correct count?  □ ______________________
Correct words?  □ ______________________
Calculat or multiplication correct?  □ ______________________

Tips
- None

To Retest
- Reuse the job setting.

☐ You have shown that you can Skip-count objects by twenties. You may highlight Skill 13 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with skip-counting objects by twenties would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Skip-Count Objects by Twenties.” Skip-counting by twenties is handy when using cash.

Here is the same daycare job setting again, and the same jar of pennies.

Here is the jar with the pennies. Count out 100 pennies by tens first. (RESPONSE)

Now let's put these same hundred pennies back together again and then put them in sets of twenties for counting. (RESPONSE)

Okay. Now skip-count the pennies by twenties if you can. (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by twenties.

Finally, let's check the skip-count total by multiplying on the calculator. (RESPONSE)

Prompt if needed.

Okay! That's the end of this job activity!

Now give me a minute to make my notes and then we’ll see what’s next.

Subskills and Resources: Skill 13

New Numeracy Skill:  Count Objects Out Loud from Zero to 100 by Twenties

Learning/Practice Activities:
Tutor/Student

Skill: Count objects out loud from zero to 100 by tens.
Tutor provides concrete objects: pennies, nails etc. (multiple of 20 up to 100).
Student touches and counts objects by twenties.
Numeracy Tier: Counting

Skill 14: Count On by Twenties

Job Setting
Daycare worker: teaching children about counting.

Task Set
- Resume count of pennies out loud by twenties.
- Write new running total as digit number.
- Write new running total in words.

Documents
- Sign (Information)

Tools
- Marker

Tutor Preparation
- Have pennies ready (multiple of 20).
- Photocopy ILLUSTRATION F: Sign (Information: Donations).
- Prepare list of underlined vocabulary from script page.

Checklist

New total said correctly? □ _________________
Digit number written correctly? □ _________________
Words written correctly? □ _________________

Tips
- Your student may want to practise writing the numbers on scrap paper before using the marker

To Retest
- Reuse the job setting. Vary the number of pennies (multiple of 20) and the starting count.

☐ You have shown that you can count on by twenties. You may highlight Skill 14 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting on by twenties would be helpful. Let’s look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Count On by Twenties.” I'm sure you will remember how to add on pennies to get a new penny count. Here they are:

Spread new pennies (multiple of 20) on the table.

Put the pennies in sets of twenties (RESPONSE).

Last day's total was 280 pennies. Skip-count on from there by twenties. (RESPONSE)

Help as needed.

Fine! Let's update the donations sign now. (RESPONSE)

Show ILLUSTRATION F with donations sign.

Help as needed.

Okay! That's the end of this job activity!

Now give me a minute to make my notes and then we’ll see what’s next.

Subskills and Resources: Skill 14

New Numeracy Skill: Resume Count of Objects Out Loud by Twenties

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Resume count of objects out loud by twenties (less than 500).**

Tutor provides concrete objects: pennies, nails etc. (multiple of 20 less than 250).

Student puts objects into sets of twenties.

Tutor gives last running count total (multiple of 20 less than 250).

Student touches sets and counts on by twenties.

**Skill: Resume count of objects out loud by twenties (more than 500).**

Tutor provides concrete objects: pennies, nails etc. (multiple of 20).

Student puts objects into sets of twenties.

Tutor gives last running count total (multiple of 20 more than 500).

Student touches sets and counts on by twenties.
Numeracy Tier: Counting

Skill 15: Skip-Count Objects by Twenty-Fives

Job Setting
Daycare worker: teaching children about counting

Task Set
- Count out 100 pennies by twenties.
- Make sets of 25 pennies.
- Skip-count pennies out loud by twenty-fives to 100.
- Check skip-count by multiplying on calculator.

Documents
- None

Tools
- Calculator

Tutor Preparation
- Put out donations jar with more than 100 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist

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<thead>
<tr>
<th>Category</th>
<th>✔️</th>
<th>✏️</th>
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<td>Pennies counted out correctly?</td>
<td></td>
<td></td>
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<tr>
<td>Counting by twenty-fives</td>
<td></td>
<td></td>
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<tr>
<td>Correct sets?</td>
<td></td>
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<td>Correct count?</td>
<td></td>
<td></td>
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<td>Correct words?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculator multiplication correct?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tips
- None

To Retest
- Reuse the job setting.

☐ You have shown that you can skip-count objects by twenty-fives. You may highlight Skill 15 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with skip-counting objects by twenty-fives would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Skip-Count Objects by Twenty-Fives.” You will use skip-counting by twenty-fives often when handling cash.

Here is the same daycare job setting again, and the same jar of pennies.

Count out 100 pennies by twenties first. (RESPONSE)

Now let's put these same hundred pennies together again and make sets of twenty-fives for counting. (RESPONSE)

Okay. Now skip-count the pennies by twenty-fives if you can. (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by twenty-fives.

Finally, let's check the skip-count total by multiplying on the calculator. (RESPONSE) Prompt if needed.

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.

Subskills and Resources: Skill 15

New Numeracy Skill: Count Objects Out Loud by Twenty-Fives to 100

Learning/Practice Activities:
Tutor/Student

Skill: Count objects out loud by twenty-fives to 100.
  Tutor provides objects: pennies, nails etc. (multiple of 25).
  Student puts objects in sets of twenty-fives.
  Student skip-counts sets aloud.
Numeracy Tier: Counting

Skill 16: Count On by Twenty-Fives

Job Setting
Daycare worker: teaching children about counting

Task Set
• Resume count of pennies out loud by twenty-fives.
• Write new running total as digit number.
• Write new running total in words.

Documents
• Sign (Information)

Tools
• Marker

Tutor Preparation
• Have pennies ready (multiple of 25).
• Photocopy ILLUSTRATION F: Sign (Information: Donations).
• Prepare list of underlined vocabulary from script page.

Checklist
New total said correctly? □ ________________
Digit number written correctly? □ ________________
Words written correctly? □ ________________

Tips
• Your student may want to practise writing the numbers on scrap paper before using the marker.

To Retest
• Reuse the job setting. Vary the number of pennies (multiple of 25) and the starting count.

☐ You have shown that you can count on by twenty-fives. You may highlight Skill 16 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting on by twenty-fives would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Script: Skill 16

You are back in the daycare and counting on by twenty-fives today!

Here are the new pennies.

Spread new pennies (multiple of 25) on the table.

Last day's total was 400. Count on by twenty-fives. (RESPONSE)

Prompt as needed so that the student puts the pennies in sets of 25 and counts on.

Fine! Let's update the donations sign now.

Show ILLUSTRATION F with donations sign.

Help as needed.

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.

Subskills and Resources: Skill 16

New Numeracy Skill: Resume Count of Objects Out Loud by Twenty-Fives

Learning/Practice Activities:
Tutor/Student

Skill: Resume count of objects out loud by twenty-fives (less than 500).
Tutor provides concrete objects: pennies, nails etc. (multiple of 25 less than 250).
Student puts objects into sets of twenty-fives.
Tutor gives last running count total (multiple of 25 less than 250).
Student touches sets and counts on by twenty-fives.

Skill: Resume count of objects out loud by twenty-fives (more than 500).
Tutor provides concrete objects: pennies, nails etc. (multiple of 25).
Student puts objects into sets of twenty-fives.
Tutor gives last running count total (multiple of 25 [more than 500]).
Student touches sets and counts on by twenty-fives.
Numeracy Tier: Counting

Skill 17: Skip-Count Objects by Fifties

Job Setting
Daycare worker: teaching children about counting

Task Set
- Count out 100 pennies by twenty-fives.
- Make sets of 50 pennies.
- Skip-count pennies by fifties to 100.
- Check skip-count by multiplying on calculator.

Documents
- None

Tools
- Calculator

Tutor Preparation
- Put out donations jar with more than 100 pennies.
- Prepare list of underlined vocabulary from script page.

Checklist

- Pennies counted out correctly?
- Counting by fifties
  - Correct sets?
  - Correct count?
  - Correct words?
- Calculator multiplication correct?

Tips
- None

To Retest
- Reuse the job setting.

☐ You have shown that you can skip-count objects by fifties. You may highlight Skill 17 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.
☐ More practice with skip-counting objects by fifties would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Here is one final skip-counting activity. It is called “Skip-Count Objects by Fifties,” and it also can be handy when counting cash. Get ready to teach the children at daycare about skip-counting once more with the penny jar.

Count out 100 pennies by twenty-fives first. (RESPONSE)

Now let's put these same hundred pennies together again and make sets of fifties for counting. (RESPONSE)

Okay. Now skip-count the pennies by fifties if you can. (RESPONSE)

If the student is able, have him count alone.

If he starts counting and runs into difficulty, count with him.

If the student is unable to count alone, count for him by fifties.

Finally, let's check the skip-count total by multiplying on the calculator. (RESPONSE)

Prompt if needed.

Okay! That's the end of this job activity!

Now give me a minute to make my notes and then we’ll see what’s next.

Subskills and Resources: Skill 17

New Numeracy Skill: Count Objects Out Loud from Zero to 100 by Fifties

Learning/Practice Activities:
Tutor/Student

Skill: Count objects out loud by fifties to 100.
Tutor provides 100 objects: pennies, nails, etc.
Student puts objects in sets of fifties.
Student skip-counts sets aloud by fifties.
Numeracy Tier: Counting

Skill 18: Count On by Fifties

Job Setting
Daycare worker: teaching children about counting

Task Set
- Resume count of pennies out loud by fifties.
- Write new running total as digit number.
- Write new running total in words.

Documents
- Sign (Information)

Tools
- Marker

Tutor Preparation
- Have pennies ready (multiple of 50).
- Photocopy ILLUSTRATION F: Sign (Information: Donations).
- Prepare list of underlined vocabulary from script page.

Checklist
- New total said correctly? ☐
- Digit number written correctly? ☐
- Words written correctly? ☐

Tips
- Your student may want to practise writing the numbers on scrap paper before using the marker.

To Retest
- Reuse the job setting. Vary the number of pennies (multiple of 50) and the starting count.

☐ You have shown that you can count on by fifties. You may highlight Skill 18 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting on by fifties would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Finally, let's show the daycare children how to count on by fifties. The title is “Count On by Fifties.”

Here are today's donations.

- **Spread pennies (multiples of fifties) on the table.**

Count on by fifties from 550 to get the new total. (RESPONSE)

- **Prompt as needed to put in sets of fifty and skip-count on.**

Fine! Let's update the donations sign now.

- **Show ILLUSTRATION F with donations sign.**
- **Help as needed.**

Okay! That's the end of this job activity!
Now give me a minute to make my notes and then we’ll see what’s next.

---

**Subskills and Resources: Skill 18**

**New Numeracy Skill: Resume Count of Objects Out Loud by Fifties**

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Resume count of objects out loud by fifties (less than 500).**
Tutor provides concrete objects: pennies, nails, etc. (multiple of 50 less than 250).
Student puts objects into sets of fifties.
Tutor gives last running count total (multiple of 50 less than 250).
Student touches sets and counts on by fifties.

**Skill: Resume count of objects out loud by fifties (more than 500).**
Tutor provides concrete objects: pennies, nails, etc. (multiple of 50).
Student puts objects into sets of fifties.
Tutor gives last running count total (multiple of fifty over 500).
Student touches sets and counts on by fifty.
**Numeracy Tier: Counting**

**Skill 19: Count On by Ones**

**Job Setting**
Daycare worker: totalling pennies by skip-counting and adding on extra by ones

**Task Set**
- Make sets.
- Skip-count sets.
- Count on by ones (up to nine) to get counting total.

**Documents**
- None

**Tools**
- None

**Tutor Preparation**
- Put 137 pennies in donations jar.
- Prepare list of underlined vocabulary from script page.

**Checklist**

- Total correct? □
- Calculator total correct? □

**Tips**
- None

**To Retest**
- Reuse job setting, but put different number of pennies in the jar: ones digit of penny total should be 1, 3, 7, or 9.

☐ You have shown that you can skip-count and then count on by ones. You may highlight Skill 19 in the COUNTING TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with skip-counting and counting on by one would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Skip-Count and Count On by Ones.” Once again, I am a daycare worker and you are my trainee. The children are collecting pennies for charity, and they are learning about numbers as they see us count the pennies. Again, you will be able to skip-count, as this is a fast way of adding or multiplying. However, this time, there will be a small change. After skip-counting all the sets of pennies, you will count on with more pennies.

Put the pennies in sets first. (RESPONSE)
  - Spread out the pennies.
  - Allow the student to choose his own set number.

Now skip-count the sets. (RESPONSE)

Okay. Now we have a total for the sets, but we have extra pennies also. Count on from the set total by ones to get the final total. (RESPONSE)
  - Affirm a right answer and discuss how the student got it.

    - If the student can’t add on alone, show him how to count forward from the total by ones touching each extra penny as he goes.

That’s the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 17

New Numeracy Skill: Count On by Ones

Learning/Practice Activities:
Tutor/Student

Skill: Count on by ones.
Tutor tells concrete number of objects.
Tutor gives extra concrete objects (nails, pennies, etc.).
Student counts on from given total, touching each object as he counts.

Enrichment Activity:
Website Interactive

Skill: Skip-count representations of sets and add on.
Website 7A
Enter address: [http://www.psc.ac.uk/ace/home.php](http://www.psc.ac.uk/ace/home.php)
Click on “Go to Site” under “Essential Skills Interactive.”
Click on “Interactive Resource Search.”
Type word “Hotel.”
Click on “Working in a Hotel.”
Click on “Stock Take in the Wine Cellar.”
Skip-count batches of wine.
Count on by ones to get total.
Click on answer button.
Read feedback.
Click on “Back” button.
Click on “Next.”
Numeracy Tier: Counting

Skill 20: Estimate and check the number

Job Setting
Daycare worker: estimating number of pennies

Task Set
- Estimate total.
- Make sets.
- Skip-count sets.
- Count on by ones to get final total.
- Compare estimate with total.

Documents
- None

Tools
- None

Tutor Preparation
- Put any number of pennies in donations jar.
- Prepare list of underlined vocabulary from script page.

Checklist

- Estimate made?
- Estimate written correctly?
- What sets made?
- Skip-count total correct?
- Final total correct?
- Estimate/total comparison correct?

Tips
- None

To Retest
- Reuse job setting, but put different number of pennies in the jar.

☐ You have shown that you can estimate a number and then compare your estimate with the exact total. You may highlight Skill 20 on your Skill Ladder. This completes the COUNTING TIER. Congratulations! Now go to the enrichment activities, if available.

☐ More practice with estimating, and then comparing your estimate with the exact total would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is the last one that we’ll do with the donations jar. It's called “Estimate and Check the Number.”

This time, before you count the pennies, you will guess the total. It is always good to guess a total first, and it will be good for the children to see you do that. Then after you count, you can compare your guess with the actual total. It will be fun to see whether you guessed exactly right, whether you overestimated, or whether you underestimated.

Before continuing, let’s take a few moments to highlight the vocabulary words in your glossary.

Help the student to highlight each of the underlined vocabulary items above.
Beside each, he should write or draw something to aid memory if needed.

Now let’s get back to the job setting!
Here are the pennies. How many do you think there are in total? (RESPONSE)

Write your estimate on this piece of scrap paper. (RESPONSE)

Now find the total number of pennies by skip-counting and adding on. (RESPONSE)

Allow the student to count as he chooses as long as he counts in English out loud.

Let’s see how your count total compares with the guess you made at the beginning. Look at your estimate on the scrap paper. Did you guess exactly right, did you overestimate, or did you underestimate? (RESPONSE)

Okay! That’s the end of this job activity! Now give me a minute to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 20

**New Numeracy Skill: Estimate and Check Number**

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Estimate number of discrete concrete objects.**
Tutor shows sets of concrete objects (nails in box, tea bags in package, pills in bottle, etc.).
Student estimates number.
Student puts objects in sets.
Student skip-counts sets.
Student counts on by ones if necessary.
Student compares estimate with count as exact, overestimate, or underestimate.

**Skill: Estimate number of object representations.**
*Photocopy ILLUSTRATION AE: Candies to Count.*
Tutor shows pictures of candies.
Student estimates number.
Student uses a pencil with eraser to draw circles around sets.
Student skip-counts sets.
Student counts on by ones if necessary.
Student compares estimate with count as exact, overestimate, or underestimate.

**Skill: Estimate number of object representations.**
*Photocopy ILLUSTRATION AF: Bubble Gums to Count.*
Tutor shows pictures of bubble gums.
Student estimates number.
Student uses a pencil with eraser to draw circles around sets.
Student skip-counts sets.
Student counts on by ones if necessary.
Student compares estimate with count as exact, overestimate, or underestimate.

**Enrichment Activity:**

**Website Interactive**

**Skill: Look at object representations; guess total.**

**Website 10A**
Enter address: [http://www.shodor.org/](http://www.shodor.org/)
Click on “Curriculum Materials.”
Click on “Project Interactivate.”
Click on “Activities.”
Click on “Number and Operation Concepts.”
Click on “Estimator.”
Click on “Problem Type” to set problem type to “Counting.”
Click on “Difficulty” to set level to “Easy.”
Click on “Answer must be” to set accuracy to “Close Enough.”
Estimate number of objects. (For grid, click on “Hint.”)
Type digit number to show estimate.
Look at feedback (e.g. “Too Low”).
Type digit numbers to adjust number that is “Close enough.”
Numeracy Tier: Number Operations

Skill 21: Total Digit Numbers

Job Setting
Kitchen helper: totalling food batches

Task Set
- Read number digits on labels of full batches.
- **Skip-count by label number to subtotal.**
- Hear number of items in partial batches (1–9).
- Add partial number to subtotal to get grand total.

Documents
- Label (Product Code)

Tools
- Pencil with eraser
- Scrap paper
- Calculator

Tutor Preparation
- Photocopy ILLUSTRATION G: Labels (Product Code: freezer food).
- Photocopy ILLUSTRATION H: Labels (Product Code: refrigerator food).
- Prepare list of underlined vocabulary from script page.

Checklist
- Subtotals- totals correct? □ 
- Grand totals correct? □

Tips
- This is the first activity in which the student is asked to total digit numbers instead of concrete objects. You may have to help him make this shift.
- In this tier, the student may use mental calculation of his own choosing to get the totals. It is not necessary for him to use skip-counting or go through the other suggested steps in the task set unless he needs to. Just be sure that his result meets the criteria on the checklist.

To Retest
- Photocopy ILLUSTRATIONS I: Label (Product Codes: freezer food: retest) and ILLUSTRATION J: Label (Product Codes: refrigerator food; retest) to reuse the job setting. Write in batch numbers differently on package labels. Choose from batch numbers: 2, 5, 10, 20, 25, or 50. Dictate different numbers to add on (1–9).

☐ You have shown that you can total digit numbers. You may highlight Skill 21 in the NUMBER OPERATIONS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with totalling digit numbers would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
You have completed the COUNTING TIER of Job Numeracy. You are moving up! Now you will start the NUMBER OPERATIONS TIER of your skill ladder. In this tier, you will probably still use lots of counting. However, you will not see the real objects while you count. Instead, you will just see digits and hear numbers. The first activity in the NUMBER OPERATIONS TIER is called “Total Digit Numbers.”

Here is the new job setting:
I am a kitchen helper, and you are my trainee. The supervisor has sent us to the storeroom to check food items on hand. We will look in the freezer and the refrigerator.

Here is the food in the freezer.

Show ILLUSTRATION G with freezer food.
Read the names of the food items to the student.

The label on each freezer box tells how many items of food are inside. None of the boxes have been opened, so they are all full batches.

There are also partial batches of leftover food in the refrigerator.

Show ILLUSTRATION H with refrigerator food.

A label on each bag shows how many items are inside. You will be adding these partial batches to those in the freezer to get the grand totals.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
He should draw or write something to aid memory if needed.

Now let’s get back to the job setting! Let's start with the hot dogs. How many hot dogs are in the freezer altogether? (RESPONSE)

Direct the student's attention to ILLUSTRATION G.
Affirm a right answer. Discuss how the student got it.
If the student needs help, show him how to skip-count the boxes, beginning at the number on the label.

Now add on hot dogs in the refrigerator. (RESPONSE)

Direct attention to ILLUSTRATION H.
If the student answers correctly, affirm the answer and discuss how he got it.
If the student needs help, show him how to put down the same number of fingers as the number on the bag and then count on by ones from the subtotal.

Okay. Now let's total the other food items on hand.

Proceed as above to count ice cream cups, potato patties, and popsicles.

Okay! That's the end of this job activity.
Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 21

New Numeracy Skill: Skip-Count Digit Numbers and Add on Digit Numbers 0–9

Learning/Practice Activities:
Tutor/Student

Skill: Skip-count digit numbers.
Tutor writes vertical list of repeated skip-count digit number (2, 5, 10, 20, 25, and 50, 100).
e.g. 25
     25
     25
     25
     25
     25
Student touches each digit number and skip-counts to total.

Skill: Add on 0 to 9.
Tutor writes number (0–9 to add to any number under 990) e.g., 377 + 6.
Student gives answer mentally.
Student checks own answer by putting down number of fingers to add and counting forward.

Student Handouts

Student Handout: Addition facts 0–9

Worksheets: Addition calculations based on basic facts (Student must run off his own.)
Website 2A
Enter address: http://www.aplusmath.com/
Click on “Worksheets.”
Click on “Addition.”
Click on button to select number of digits.
Click on button to select number of problems.
Click on button to select vertical or horizontal formal.
Click on button to create worksheet.
Print worksheet.

Learning/Practice Activities:
Website Interactive

Skill: Type total of two single digits (see digit numbers and object representations).
Website 11D
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Bilambil Primary School.”
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths.”
Click on “Level B.”
Click on “Addition.”
Type digit number answer.
Skill: Choose total of two single digits (horizontal).
E.g., 3 + 6 = ______

Website 1N
Enter address: http://www.aaaknow.com/
Click on “Addition.”
Click on “Adding Numbers I.”
Scroll down to page 2.
Click on “Start” button.
Mentally total two numbers.
Click on button to show total.
See box below for feedback.

Skill: Type total of two single digits (horizontal).
E.g., 3 + 6 = ______.

Website 1O
Enter address: http://www.aaaknow.com/
Click on “Addition.”
Click on “Adding Numbers II.”
Scroll down to page 2.
Click on “Start” button.
Type digit number total.
Click on “Check” box.
See box below for feedback.

Skill: Type total of two single digits (vertical).
E.g., 3 + 4

Website 2B
Enter address: http://www.aplusmath.com/
Click on “Flashcards.”
Click on “Java Flashcards Addition.”
Type digit number total.
Press Enter to show “Finished.”
Check message box for feedback.

Skill: Choose total of two number words (0–10).
E.g., Three plus six is ______.

Website 1P
Enter address: http://www.aaaknow.com/
Click on “Addition.”
Click on “Adding Using Words.”
Scroll down to page 2.
Click on “Start” button.
Type digit number total.
Click on “Check” box.
See box below for feedback.
Enrichment Activities:
Website Interactive

Skill: Total two single digits (time limit).
Use Websites 1N, 1O, and 1P as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”

Skill: Type total of three single-digit numbers in horizontal addition sentence.
E.g., 3 + 6 + 4 = ______
Website 1Q
Enter address: http://www.aaaknow.com/
Click on “Addition.”
Click on “Adding Three Numbers.”
Scroll down to page 2.
Click on “Start” button.
Type digit number to show total.
Click on “Check” button.
See box below for feedback.

Skill: Choose totals to reveal picture.
Website 2C
Enter address: http://www.aplusmath.com/
Click on “Game Room.”
Click on “Addition Version” under the “Hidden Picture” heading.
Click on “Start Game” button.
Click on square with total.
Continue until picture is revealed.
Numeracy Tier: Number Operations

Skill 22: Total Numbers Heard

Job Setting
Kitchen helper: totalling food batches

Task Set
- Hear numbers on batch labels.
- Hear number of batches.
- Put down fingers to equal number of batches.
- Skip-count by batch number, putting one finger down for each count.

Documents
- None

Tools
- None

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
Correct total? □ _______________________

Tips
- As in the last job setting, students may be able to meet the checklist criteria without following the steps in the TASK SET. Affirm this skill.

To Retest
- Reuse job setting, but vary numbers. Batch labels should be 2, 5, 10, 20, 25, or 50. Number of batches should not exceed ten.

☐ You have shown that you can total numbers heard. You may highlight Skill 22 in the NUMBER OPERATIONS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with totalling numbers heard would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In the last activity, you showed that you could skip-count digit numbers on package labels. When you saw the digit numbers, you were able to skip-count to find a subtotal and then add on to get a grand total.

This activity is called “Total Numbers Heard.” It is very similar to the last one, but this time, you will not be able to see packages or their labels. Instead, you will just use numbers that you hear.

Here is the job setting.
Again, I am a kitchen helper, and you are my trainee. The boss wants to know how many food items are on hand in the freezer. We are too busy to go to the freezer ourselves, but Max, our co-worker, has had a quick look and given us some information. You will use his numbers to figure out totals for the boss.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.
Help the student highlight each of the underlined vocabulary items above.
He should draw or write something to aid memory if needed.

Now let’s get back to the job setting!
Max said that he counted eight packages of cinnamon buns. I know there are five buns to a package. Can you figure out how many cinnamon buns that would be altogether? (RESPONSE)
Affirm a correct answer.
If the student is unable to answer, or answers incorrectly, show him how to select eight fingers and skip-count by five to the total.

Okay, now Max said there were six boxes of ice cream cups. Those usually come 25 to a box. How many would that be? (RESPONSE)
Proceed as above.

Now let's figure out the number of potato patties. They're always in bags of 20 and Max said he counted nine. How many potato patties do we have? (RESPONSE)
Proceed as above.

And finally, what about the frozen burgers? I think they're usually in tens. Max counted six of them. How many burgers are there on hand? (RESPONSE)
Proceed as above.

Okay! That's the end of this job activity.
Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 22

New Numeracy Skill: Total Numbers by Skip-counting

Learning/Practice Activities:
Tutor/Student

Skill: Skip-count digit numbers mentally (by 2, 5, 10, 20, 25, and 50, 100).
Tutor tells number of items in set and number of sets (e.g., six sets of 20).
Student holds up fingers equal to number of sets (e.g., six fingers).
Student skip-counts by number of items in set, putting one finger down for each set (e.g., “twenty, forty, sixty, eight, one hundred, one hundred twenty, one hundred forty”).
Numeracy Tier: Number Operations

Skill 23: Add On Ten

Job Setting
Kitchen helper: totalling food batches

Task Set
- Skip-count batches mentally.
- Add on ten mentally.
- Say total.

Documents
- None

Tools
- None

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist

Skip-count total correct? □

Ten added correctly? □

Tips
- None

To Retest
- Reuse job setting, but vary numbers. Batch labels should be 2, 5, 10, 20, 25, or 50. Have student add 10 to skip-count totals.

☐ You have shown that you can add on tens. You may highlight Skill 23 in the NUMBER OPERATIONS on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with adding on tens would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Script: Skill 23

This activity is called “Add On Ten.” It's very similar to the last one. Again, we are kitchen helpers checking on the food supply in the freezer and the refrigerator. A co-worker, Sarah this time, has reported on the number of full batches in the freezer, and I've had a look at what's in the refrigerator. Your job will be to give the grand totals to the boss.

According to Sarah, there are six packages of cinnamon buns, 20 to a package. How many buns would that be? (RESPONSE)
And I also counted 10 more buns in the refrigerator, so what is the grand total? (RESPONSE)

Affirm a correct answer and discuss how the student got it.
If the student makes a mistake, or doesn't know how to proceed, show him how to add 10 mentally by increasing the tens digit by one.

Okay. Let's talk about the frozen apple tarts. Sarah saw three boxes of 25. How many are in the freezer? (RESPONSE)
There are also 10 more pies in the refrigerator. What's the total altogether? (RESPONSE)

Prompt as above.

And finally, it seems that there are nine boxes of tea biscuits. I think they come 50 to a box. What's the total number of frozen biscuits?
Fine. So just add on the 10 more biscuits I saw in the refrigerator for the grand total. (RESPONSE)

Prompt as above.

That's the end of this job activity!
Now just give me a minute to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 23

New Numeracy Skill: Add On Ten

Learning/Practice Activities:
Tutor/Student

Skill: Add on ten.
Tutor gives any number under 990 and direction to add 10 (e.g., add 10 to 271).
Student gives answer mentally.
Student checks own answer by putting down 10 fingers to add and counting forward.

Skill: Hear and add on 10 mentally.
Tutor says number plus 10.
E.g., one hundred twenty-eight plus 10
Student finds total by mental addition (increasing tens digit by one).

Learning/Practice Activities
Website/Interactive

Skill: Add 10 to any number (See digit numbers and representations).
Website 11E
Enter address: http://www.teachers.ash.org.au/heather/
Click on “Bilambil Primary School.”
Click on “Welcome to Bilambil.”
Click on “Rainforest Maths.”
Click on “Level B.”
Click on “10's Patterns” (on Algebra line).
Type digit number answer.

Skill: Type total when 10 is added (maximum of 90) to complete horizontal word sentence.
Website 1R
Enter address: http://www.aaaknow.com/
Click on “Counting.”
Click on “Next Number When Counting by Tens.”
Click button “Start Count Up by Tens.”
Type digit number to show total when 10 is added.
Numeracy Tier: Number Operations

Skill 24: Add on a Calculator

Job Setting
Sewing machine operator: totalling piecework items

Task Set
- Add several two-digit numbers from list on calculator.
- Read total from calculator display.

Documents
- List (Piecework Output)

Tools
- Calculator

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
- Total correct on calculator? ☐ ______________________
- Total read aloud correctly? ☐ ______________________

Tips
- Your student may be confused by the decimal point that may be in the calculator display. Explain that he does not need to write a decimal at the end of a whole number.

To Retest
- Reuse original job setting. Print by hand a similar informal work output list and enter different work output numbers (two-digits).

☐ You have shown that you can add on a calculator. You may highlight Skill 24 in the NUMBER OPERATIONS TIER of your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with adding on a calculator a total would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
You have had lots of practice in the past activities finding totals. Often you found them by skip-counting. Sometimes you needed to skip-count and then count on. You have also multiplied on a calculator to check the total number.

In this activity, you will be finding a total by adding several numbers together. Skip-counting and multiplying won't work here because the numbers that you are putting together are not all the same. The title of this activity is “Add on a Calculator.”

Let's talk about adding for a minute. You may have experience adding with paper and pencil. Is this a skill that you have? (RESPONSE)

If the student knows how to add with pencil and paper give him lots of reinforcement, but explain that in this activity, he will be using a calculator for that purpose.

Here is the job setting.
This time I am a sewing machine operator, and you are my trainee. We sew T-shirts on a piecework basis. Each week we tell the boss how many shirts we have made. The more shirts we have sewn in the week, the more money we make.

You keep a list of the shirts you have sewn each day. Here is your list for this week.

Show ILLUSTRATION K with piecework list for Aug. 20-25.
You are going to add up your daily counts to get your weekly total. You may use the calculator to do the adding.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above. Beside each item he should write or draw sometime to aid memory if needed.

Now let's go back to the job setting.
If you are able, go ahead and find your total piecework count for the week on the calculator. Read me the answer out loud when you have it. (RESPONSE)

Give calculator.
If the student proceeds alone, let him finish by himself. Affirm if he gives the right answer.

If he makes a mistake or if he doesn't know what to do, add for him on the calculator and then let him read the answer from the display.

Okay! That's the end of this job activity!
Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 24

New Numeracy Skill: Add Numbers from List on a Calculator

Learning/Practice Activities:
Tutor/Student

Skill: Add numbers from list on calculator.
Tutor provides list of five two-digit numbers and tells student to add them on calculator.
Student enters one addition sentence on calculator.
Student reads answer from calculator display.
Student reads total from calculator display.

Learning/Practice Activities:
Website Interactive

Skill: Enter number sentence on calculator for two addends.
Website 1T
Enter address: http://www.aaaknow.com/
Click on “Addition” in the left navigation bar.
Click on “Addition” in the Addition – Table of Contents.
Click on “Adding Tens.”
Scroll down to page 2.
Click on “Start.”
Type digit number to show sum.
Click on “Check.”
See below for feedback.

Enrichment Activities:
Website Based

Skill: Enter number sentence on calculator for two addends (time limit).
Use Website 1T as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Number Operations

Skill 25: Add Multiples of Ten Mentally

Job Setting
Sewing machine operator: totalling items for piecework

Task Set
- Add multiples of ten from list.
- Check mental addition by adding on calculator.

Documents
- List (Piecework Output: multiples of 10)

Tools
- Calculator
- Scrap paper
- Pencil with eraser

Tutor Preparation
- Print by hand ILLUSTRATION L: List (Piecework Output: multiples of ten).
- Prepare list of underlined vocabulary from script page.

Checklist
Mental Addition
- Done without prompt? □ ______________________
- Done with prompt? □ ______________________
- Total correct on calculator? □ ______________________

Tips
- None

To Retest
- Reuse original job setting. Print by hand informal work-output list, but enter different work-output numbers (multiples of ten).

☐ You have shown that you can add multiples of ten. You may highlight Skill 25 in the NUMBER OPERATIONS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with adding multiples of ten would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Script: Skill 25

The title of this activity is “Add Multiples of Ten.” The job setting is the same as the last one. Again, you are a trainee sewing machine operator and you are adding up your daily piecework counts to find your weekly total. This time, however, you will get the answer without using a calculator. You will not use a paper or pencil either. You will be getting the answer mentally.

Here is the list with the number of shirts that you have made this week.

Show ILLUSTRATION L with piecework list for Aug. 28-Sept. 1.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above. Beside each item he should write or draw sometime to aid memory if needed.

Now back to the job setting!
Can you add the daily counts in your head and tell me the total? (RESPONSE)

Affirm a correct answer. Discuss how it was found.

If the student doesn't know how to proceed, show him this method:
Add digits in the tens column, two at a time using fingers if needed.
“Write” digit number with finger and add zero to right (ones place).
Say the digit number out loud.

Now write that total on this piece of scrap paper.
Give paper and pencil.

You can check that total by adding on the calculator now. (RESPONSE)

If the calculator total is different than the mental total, discuss why.

Okay! That's the end of this job activity!
Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 25

**New Numeracy Skill: Add Two-Digit Multiples of Ten Mentally**

**Learning/Practice Activities:**
Tutor/Student

**Skill: Add three or more single digit numbers mentally.**
Tutor gives vertical or horizontal number addition number sentence with three or more single digit numbers.
E.g., \(2 + 4 + 6 + 5 = \) ____
Student adds digits two at a time orally.

**Skill: Add two-digit multiples of ten mentally from list.**
Tutor gives vertical or horizontal number addition number sentence with several two-digit multiples of ten.
E.g., \(20 + 40 + 60 + 50 = \) ____
Student adds tens digits two at a time.
Student “writes” total of tens digits with finger on table.
Student adds zero to right of “written” total.
Student “reads” “written total” aloud.

**Learning/Practice Activities:**
Website Interactive

**Skill: Type total of two-digit multiples of ten in horizontal addition sentence.**
E.g., \(30 + 60 = \) ____.
Website 1U
Enter address: http://www.aaaknow.com/
Click on “Addition.”
Click on “Adding Tens.”
Scroll down to page 2.
Click on “Start” button.
Mentally total two numbers.
Type digit number to show total.
Click on “Check” button.
See box below for feedback.

**Enrichment Activities:**
Website Interactive

**Skill: Type total of two-digit multiples of ten in horizontal addition sentence (time limit).**
Use Website 1U as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Number Operations

Skill 26: Find a Difference Mentally

Job Setting
Daycare worker: determining number of children missing

Task Set
- Count images of children.
- Compare latest count with original.
- Find number of children missing (up to 10).

Documents
- Diagram: Playground

Tools
- None

Tutor Preparation
- Photocopy ILLUSTRATION M: Diagram (Playground).
- Prepare list of underlined vocabulary from script page.

Checklist

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture count correct?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference given correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental subtraction?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counting forward?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counting backward?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tips
- People have various strategies for finding the difference. For example, you may count backwards, use addition/subtraction facts, or count forwards. Affirm all strategies that lead to the right answer.

To Retest
- Photocopy ILLUSTRATION N: Diagram (Playground: retest) to reuse original job setting. Change the original number of children in the script. Draw the remaining stick children in different parts of the “playground.” The difference in number should be no more than 10.

☐ You have shown that you can find a difference mentally. You may highlight Skill 26 in the NUMBER OPERATIONS TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with finding a difference mentally would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity will be a little change from finding a total. Sometimes you need to find out how many items are missing from a total count. The missing number will be the difference between the original number and the current count. There are many ways to find a difference. You may use counting forward, counting backward, adding or subtracting. All ways are good as long as they tell the missing number correctly.

The name of this activity is “Find How Many are Missing Mentally.” That means that again you will not be using paper, pencil or a calculator.

Here is the job setting.
You and I work in a daycare center. Daycare workers need to count the children in their care often. They must know quickly if any are missing from their total count.

Here is a diagram of the daycare playground where you and I are working. You can see the children playing in different parts of the playground. (DIALOGUE)

Show ILLUSTRATION with playground diagram.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw sometime to aid memory if needed.

Now let’s go back to the job setting!
We counted 29 children when we came outside, but there aren't 29 children any more. Count the children in the picture now and tell me how many are missing. (RESPONSE)

If the student gives the right answer, affirm it and discuss how he got it.

If he gives the wrong difference, or can’t answer, demonstrate counting on by ones from the present count to the original total as you put fingers down. Then count the fingers used. That number will be the difference.

Okay! That’s the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
New Numeracy Skill: Find Difference of 1–10 Mentally

Learning/Practice Activities:
   Tutor/Student

Skill: Find difference of 1–10 mentally by counting forward on fingers.
   Tutor presents challenge to find the difference in a job story involving two numbers
   under 1,000. The difference between the numbers should not be more than 10.
   E.g., There were 168 nails in your toolbox when you started and there are only 159
   now. How many nails have you used?
   Student selects lower number.
   Student counts on from lower to higher number by ones, putting one finger down for each
   count number.
   Student counts fingers used.
   Student gives finger count as difference.

Student Handouts

Handout: Subtraction facts 0–9
Create Worksheet from Website
Calculations Using Basic Subtraction Facts
   Website 2D
   Enter address: http://www.aplusmath.com/
   Click on “Worksheets.”
      Click on “Subtraction.”
      Click on button to select “Up to 18.”
      Click on button to select Number of Problems.
      Click on button to select Vertical or Horizontal Format.
      Click on button to create worksheet.
      Print worksheet.

   Learning/Practice Activities:
      Website Interactive

Skill: Subtract two numbers to maximum of 18 (see digit numbers and object
   representations).
   Website 11F
   Enter address: http://www.teachers.ash.org.au/heather/
   Click on “Bilambil Primary School.”
      Click on “Welcome to Bilambil.”
      Click on “Rainforest Maths.”
      Click on “Level B.”
      Click on “Subtraction.”
      Type digit number answer.
Skill: Choose difference of two digit numbers to maximum 10 to complete horizontal number sentence.
E.g., 6 – 3 = _____.

Website 1V
Enter address: http://www.aaaknow.com/
Click on “Subtraction.”
Click on “Subtracting Numbers I.”
Scroll down to page 2.
Click on “Start” button.
Mentally find difference between two numbers.

Click on button to show difference.
See box below for feedback.

Skill: Type in difference of two digit numbers to maximum 10 to complete horizontal number sentence.
E.g., 6 – 3 = _____.

Website 1W
Enter address: http://www.aaaknow.com/
Click on “Subtraction.”
Click on “Subtracting Numbers II.”
Scroll down to page 2.
Click on “Start” button.
Mentally find difference between two numbers.

Type digit number difference.
See box below for feedback.

Skill: Choose difference of two number words to maximum “ten” to complete horizontal number sentence.
E.g., Six minus three is _____.

Website 1X
Enter address: http://www.aaaknow.com/
Click on “Subtraction.”
Click on “Subtracting Using Words.”
Scroll down to page 2.
Click on “Start” button.
Mentally subtract two numbers.

Click on button to show difference in words.
See box below for feedback.
Skill: Choose difference of two digit numbers to maximum 18 to complete horizontal number sentence.
E.g., 16 – 7 = ______.

Website 1Y
Enter address: http://www.aaaknow.com/
Click on “Subtraction.”
Click on “Subtractions Facts: All for 0 through 10.”
Click on “Start” button.
Mentally subtract two numbers.
Click button to select total.
See box below for feedback.

Skill: Type difference (maximum 20) to complete vertical digit number sentence.
E.g., 12
– 4

Website 2E
Enter address: http://www.aplusmath.com/
Click on “Flashcards.”
Click on “Java Flashcards Subtraction.”
Mentally find difference.
Type digit number to show difference.
Press “Enter.”
Check message box for answer.

Enrichment Activities:
Website Interactive

Skill: Find difference of two digit numbers (time limit).
Use Websites 1V, 1W, 1X, and 1Y as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”

Skill: Choose difference (maximum can be more than 10) to complete vertical digit number sentence.
E.g., 16
– 9

Website 2F
Enter address: http://www.aplusmath.com/
Click on “Game Room.”
Click on “Subtraction Version” under the Hidden Picture heading.
Click on “Start Game” button.
Click on square with difference.
Continue until picture is revealed.
Numeracy Tier: Number Operations

Skill 27: Subtract on a Calculator

Job Setting
Visiting homemaker: finding out how many pills are missing from the bottle

Task Set
- Count remaining pills.
- **Enter subtraction number sentence on calculator.**
- Read answer from calculator display aloud.

Documents
- None

Tools
- Pencil with eraser
- Scrap paper
- Calculator

Tutor Preparation
- Use a real medication bottle (Aspirin etc.) for this activity.
- Check the package to see how many pills are in a full bottle.
- Bring the bottle partially empty to the tutoring session.
- Prepare list of underlined vocabulary from script page.

Checklist
- Current count correct? ☐
- Number sentence correct? ☐
- Answer read correctly? ☐

Tips
- Student needs to enter larger of two numbers first to make correct subtraction number sentence

To Retest
- Reuse job setting but vary numbers

☐ You have shown that you can subtract on a calculator. You may highlight Skill 27 in the NUMBER OPERATIONS TIER of your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with subtracting on a calculator would be useful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In the last activity, you found how many children were missing from the daycare playground. It was easy to find this number mentally because the number was between one and ten. In this activity you will find a larger missing number. You may still be able to find it mentally or perhaps by using paper and pencil. Those are great skills. However, this time you will subtract with the calculator. The title of the activity is “Subtract on a Calculator.”

Here is the job setting again:
I am a visiting homemaker, and you are my trainee. We need to find out how many pain pills our client, Betty, has taken since we last visited her. Betty is elderly and does not remember how many pills she has taken. We know that the pill bottle was full when we last saw her. We will find out how many pills she has taken by counting the ones left in the bottle and subtracting that count from the original number.

Before continuing, let’s take a few moments to highlight the vocabulary in your glossary.
Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw sometime to aid memory if needed.

Now let’s go back to the job setting!
Here is Betty’s pill bottle. Count the pills left out loud. (RESPONSE)
The student may count as he wishes as long as it is in English out loud.
Affirm a correct count.
If the count is incorrect, recount with the student to check. Use skip-counting and counting on.

Fine. Write that number down on this piece of scrap paper. (RESPONSE)
The original number of pills in the bottle was _____. Write that down too. (RESPONSE)
Give the original number that was really in the bottle.

So now we have two numbers, the current count which you have written on the paper, and the original count. If you subtract those two numbers on the calculator, you will find out how many pills Betty has taken. Can you do this and tell me the answer? (RESPONSE)

If the student uses the calculator independently to check the answer, affirm it.

If he is unable or asks for help, show him how to enter the larger number, press the minus sign, enter the lower number, and press the equal sign.

Okay! That’s the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
New Numeracy Skill: Find a Difference of Two Numbers on a Calculator

Learning/Practice Activities:
Tutor/Student

Skill: Hear two numbers, find difference on calculator.
Tutor gives student any two numbers up to 999 orally.
Student enters higher number on calculator.
Press minus sign.
Enter lower number on calculator.
Press equal sign.
Read number from calculator display.

Learning/Practice Activities:
Website Interactive

Skill: Enter number sentence on calculator to find difference of two-digit numbers.
Website 1Z
Enter address: http://www.aaaknow.com/
Click on “Subtraction.”
Click on “Subtraction Using a Calculator.”
Scroll down to page 2.
Click on “Start” button.
Type digit numbers and signs to enter subtraction sentence.
See below for feedback.

Enrichment Activities:
Website-Based

Skill: Enter number sentence on calculator to find difference of two-digit numbers (time limit).
Use Website 1Z above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Number Operations

Skill 28: Divide on a Calculator

Job Setting
   Food and beverage server: putting table flowers in vases

Task Set
   • Enter division sentence on calculator (numbers will divide without remainder).
   • Read answer aloud from calculator display.

Documents
   • None

Tools
   • Calculator

Tutor Preparation
   • Prepare to talk about when you divide to share.
   • Prepare list of underlined vocabulary from script page.

Checklist
   Correct answer? □ ______________________
   Answer read correctly? □ ______________________

Tips
   • Student needs to enter the larger number first on the calculator when dividing.
   • Your student may be able to tell you the answer without using a calculator. Affirm this skill. Then check that he can also do the calculation with the calculator.

To Retest
   • Reuse job setting but vary the number of flowers and tables. Make sure that the numbers will divide without a remainder.

☐ You have shown that you can divide on a calculator. You may highlight Skill 28 in the NUMBER OPERATIONS TIER of your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with dividing on a calculator would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In past activities, you have had practice with finding totals and finding differences. In this activity, the skill is sharing.

Let's talk for a minute about sharing. Parents often have to share things, don't they? If they are giving cookies to the children, they know that it's very important to share evenly. The children always watch closely to see if their parents are being fair. Let's talk about some other times we have to share equally. (DIALOGUE)

There are different ways to share evenly. You can use counting, adding, multiplying, subtracting, or dividing. You can do it in your head, with paper and pencil, or with a calculator. All ways are good as long as you find the fairest way to share. In this activity, however, you will be using dividing. The title is “Divide on a Calculator.”

Here is the job setting.
This time I am a food server at a hotel, and you are my trainee. We are setting tables for a banquet. Flowers have been ordered for the tables. We must divide the flowers up evenly so that there is the same number on each table.

Before continuing, let's take a few moments to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw sometime to aid memory if needed.

Now let’s go back to the job setting.
I have counted the flowers already. There are 70 of them. There are only 14 tables. Can you divide on the calculator to share the flowers equally among the tables? (RESPONSE)

If the student can divide on the calculator alone, affirm his answer.

If the student unknowingly makes an error, check it for him and discuss the reason for the difference in answers.

If the student is unable to divide on the calculator, demonstrate for him how to enter the larger number, press the divide sign, enter the lower number, and enter the equal sign.

That's the end of this job activity.
Now give me a few moments to make my notes, and then we'll see what's next.
New Numeracy Skill: Divide on a Calculator (no remainder)

Learning/Practice Activities:
Tutor/Student

Skill: Hear two numbers; divide larger by smaller.
Tutor gives student any two numbers up to 999 orally that will divide without remainder.
Student selects higher number.
Student enters higher number on calculator.
Student enters divide sign.
Student enters lower number on calculator.
Student presses equal sign.
Student reads answer from calculator display.
Numeracy Tier: Number Operations

Skill 29: Round Off Numbers

Job Setting
Nanny: helping with homework

Task Set
- Change all but first digits in digit number to zero.
- Decide whether to change first digit or leave it the same.

Documents
- Form (School Worksheet: “Round Off!”)

Tools
- Lined paper
- Pencil with eraser

Tutor Preparation
- Photocopy ILLUSTRATION O: Form (School Worksheet: “Round Off!”).
- Prepare list of underlined vocabulary from script page.

Checklist
Correct rounded number? ☐ _______________________

Tips
- Your student may have learned more specific forms of rounding off. Affirm his knowledge, but explain that this is a simple method of rounding that makes numbers sometimes easier to remember and use.

To Retest
- Reuse original job setting. Print by hand another copy of the homework assignment sheet with different numbers.

☐ You have shown that you can round off numbers. You may highlight Skill 29 in the NUMBER OPERATIONS TIER of your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with rounding off numbers would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
There are two more activities left in the NUMBER OPERATIONS TIER. In both you will be rounding off numbers. Rounding off numbers means changing some digits in the number so that the numbers are easier to remember and use. Rounded numbers are never exactly the same as actual numbers. They are just approximate. We often use the word “about” when we are talking about them. For example, your husband or wife might ask you how much you spent on groceries when you come home from shopping. You may have spent exactly $59.42, but you would probably just say you had spent “about $60.”

This new activity is called “Round Off Numbers.” Here is the job setting. I am a nanny, and you are my trainee. We are helping Billy, the child in our care, with his homework worksheet. He must round off some numbers to the last digit on the left. Before you help Billy, you must be sure that you can do the worksheet yourself. I have made an extra copy so that you can practise.

Here is your copy of the worksheet. Let's look at it together.

Show ILLUSTRATION O with school worksheet.
Discuss the different parts of the school worksheet.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.
Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw sometime to aid memory if needed.

Now let's get back to the school worksheet!
Let's look at the first question. You have to round off the digit number to the last digit on the left. That means you must change all the digits to zero except for the first one. The first digit will stay the same or will go up by one. I will write the first rounded number for you.

Write answer.

Can you write the other answers by yourself, or would you like me to explain more first? (RESPONSE)

If the student is able to proceed alone, let him do so. If he is generally on the right track, leave feedback until the end and then make corrections.

If the student is unable to proceed yet, explain again how you did the first question and talk him through a few until he can go on independently.

Okay. Now just for practice before Billy comes, read each set of digit numbers out loud. Read the actual number first and then the rounded number. (RESPONSE)

That's the end of the job activity!
Now give me a moment to make my notes, and then we'll see what's next.
New Numeracy Skill: Round Off Numbers to 999 to the Last Digit on the Left

Learning/Practice Activities:
Tutor/Student

Skill: Round off two- and three-digit numbers to the last digit on the left.
   Tutor writes digit number.
   Student writes rounded digit number.

Learning/Practice Activities:
Website Interactive

Skill: Round off digits 0 to 10.
Website 11G,
Enter address: http://www.teachers.ash.org.au/heather/
   Click on “Bilambil Primary School.”
   Click on “Welcome to Bilambil.”
   Click on “Rainforest Maths.”
   Click on “Level C.”
   Click on “Rounding up to 10, 100.”
   Click on “10.”
   Click and drag digit number in yellow circle to its rounded digit number.

Skill: Round off digits 11 to 100.
Website 11G
Enter address: http://www.teachers.ash.org.au/heather/
   Click on “Bilambil Primary School.”
   Click on “Welcome to Bilambil.”
   Click on “Rainforest Maths.”
   Click on “Level C.”
   Click on “Rounding up to 10, 100.”
   Click on “100.”
   Click and drag digit number in yellow circle to its rounded digit number.

Skill: Round off two-digit numbers to last digit on left.
Website 1Aa
Enter address: http://www.aaaknow.com
   Click on “Estimation.”
   Click on “Rounding Numbers: Rounding.”
   Click on “Start Rounding.”
   Click on rounded digit number that is closest to digit number at top.
See below for feedback.
Skill: Rounding off three-digit numbers to last digit on left.

**Website 1Ab**
- Enter address: [http://www.aaaknow.com](http://www.aaaknow.com)
- Click on “Estimation.”
- Click on “Rounding Numbers: Nearest Hundred.”
- Click on “Start Rounding.”
- Click on rounded digit number that is closest to digit number at top.
- See below for feedback.

**Enrichment Activities:**
- **Website Interactive**

Skill: Round off two- and three-digit numbers to last digit on left (time limit).

Use Websites 1Aa and 1Ab as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Number Operations

Skill 30: Round Off to Guess the Total

Job Setting
Sewing machine operator: estimating total work output

Task Set
- Round off numbers.
- List rounded numbers.
- **Estimate total by adding left hand digits mentally.**
- Add on calculator to find actual total.
- Compare estimate with actual total.
- Copy actual from calculator display.

Documents
- Form (Piecework Output)

Tools
- Calculator
- Pencil with eraser
- Scrap paper

Tutor Preparation
- Print by hand ILLUSTRATION P: Form: (Work Output Sheet: Sept. 4-8).
- Prepare list of underlined vocabulary from script page.

Checklist

Correct list items? ☐
Correct total estimate? ☐
Correct division on calculator? ☐
Correct comparisons? ☐

Tips
- None

To Retest
- Reuse original job setting. Enter different numbers.

☐ You have shown that you can round off to guess a total. You may highlight Skill 30 on your Skill Ladder. This completes the NUMBER OPERATIONS TIER. Good job! Now go to the enrichment activities, if available.

☐ More practice with rounding off to guess a total would be helpful. Let’s look at some learning and practice activities. We will focus on (area of difficulty).
You have shown that you can round numbers off. Rounded numbers can help you guess the answer to a number operation before you actually calculate it. It is always a good idea to guess before finding exact answers. Guessing can help you plan ahead, and it can help you find mistakes in your adding, subtracting, multiplying and dividing.

This activity is called “Round Off to Guess the Total.” Here is the job setting. It is one that you are familiar with. I am a sewing machine operator, and you are my trainee. We sew T-shirts on a piecework basis. You are going to add up your daily piecework counts from this list to get your weekly total. Here is the list.

Show ILLUSTRATION P with piecework list from Sept. 4 - Sept. 8.

Before adding up the daily totals, however, you will estimate the total. Then you can find the actual total by adding on the calculator.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above. Beside each item he should write or draw sometime to aid memory if needed.

Now let’s go back to the job setting. Round off each of your daily total numbers and put the rounded number to the right of the actual number on your list. (RESPONSE)

Give pencil with eraser. Help as needed.

Now draw a line under your rounded list, add the rounded numbers in your head, and write the total at the bottom. (RESPONSE)

Help as needed.

Now that you have your estimated total, add the actual numbers on the calculator and read the actual total out loud. (RESPONSE)

Give calculator.

Finally, let's compare the calculator total with your estimate on paper. Were you exactly right, or did you overestimate or underestimate? (RESPONSE)

Okay! That's the end of this job activity! Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 30

New Numeracy Skill: Round Off Numbers to Estimate the Total

Learning/Practice Activities:
Tutor/Student

Skill: Round off two-digit numbers to estimate the total.
Tutor writes several numbers with two digits each.
Student writes list of rounded digit numbers.
Student mentally adds left hand digits and writes rounded total.
Student uses calculator to find actual total.
Student compares estimate with actual total as exact, overestimate or underestimate.

Learning/Practice Activities:
Website Interactive

Skill: Round off two-digit numbers to estimate total.
Website 1Ac
Enter address: http://www.aaaknow.com
Click on “Estimation.”
Click on “Rounding Numbers: Estimating Sums I.”
Click on “Start” button.
Click on rounded digit number that is best estimate of total.
See below for actual total.
Tell tutor if estimate is exact, overestimate, or underestimate.

Enrichment Activities:
Website Interactive

Skill: Round off two-digit numbers to estimate total (time limit).
Use Website 1Ac as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Money

Skill 31: Read Money in Digits

Job Setting
Cashier: reading receipt to customer

Task Set
- Find item amounts on receipt.
- Find total on receipt.
- Read amounts aloud.

Documents
- Form (Store Receipt)

Tools
- None

Tutor Preparation
- Photocopy ILLUSTRATION Q: Form (Store Receipt: totals).
- Prepare to discuss why store receipts can be important.
- Prepare list of underlined vocabulary from script page.

Checklist
- Find item amounts on receipt? □
- Find total on receipt? □
- Amounts read correctly? □

Tips
- Money is not always written in a standard way on cash receipts. For example, the dollar sign is not always present for all items. You can encourage your student to spot variations.

To Retest
- Reuse job setting. Use an actual store receipt.

☐ You have shown that you can read money in digits. You may highlight Skill 31 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with reading money in digits would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
You have completed the NUMBER OPERATIONS TIER of Job Numeracy. You are doing just fine! Now you will start moving up the MONEY TIER. In the first two activities of this tier, you will show that you can read and write amounts of money using digit numbers.

The title of this first activity is “Read Money in Digits.” Whenever you shop at any store, you get a paper receipt to show what you bought, its cost, what you paid, and your change. Here is a sample of a store receipt.

Show ILLUSTRATION Q with receipt.

Store receipts can be important sometimes. Can you think of some reasons why? (DIALOGUE)

Here is the job setting.
I am a cashier in a convenience store, and you are my trainee. Sometimes customers complain that they have been charged too much money. In this kind of situation, it is good to read the receipt out loud to the customer to show where his money has gone. You are going to practise for such a situation. From the receipt, you will be reading the costs for each item, the tax, and the total amount owing.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw something to aid memory if needed.

Now, let's get back to the job activity!
Look at the receipt again.
I will pretend to be the customer and you will answer my questions.

Read script below, taking time for student answers:
“Somehow it seems as if that all cost more than it should have. I don't have my glasses with me right now, so I hope you won’t mind reading the receipt to me.

Now I know I bought some gum. How much was that? (RESPONSE)
And what about the toilet tissue? (RESPONSE)
Sugar? (RESPONSE)
And I got milk too. (RESPONSE)
What was the tax on that? (RESPONSE)
And the total? (RESPONSE)

Well that all adds up. I guess everything just costs more than we think, eh?

Thanks for your help.”

That's the end of this job activity!
Now give me a moment to make my notes, and then we'll see what's next.
Skill: Read cent amounts.
Tutor writes cent amount as decimal number in digits (e.g., .99).
Student reads number aloud as cents (e.g., “ninety-nine”).

Skill: Read dollar amounts (no cents).
Tutor writes dollar amount as whole number plus decimal (e.g., 2.00).
Student reads whole number aloud as dollars.

Skill: Read dollar and cent amount (two ways).
Tutor writes dollar and cent amount as whole number plus decimal (e.g., 2.95).
Student reads whole number aloud (e.g., “two”).
Student reads decimal number aloud (e.g., “ninety-five”).
Student restates as dollars and cents (e.g., “two dollars and ninety-five cents”).

Skill: Read store receipts.
Tutor provides variety of cash receipts from store (or student brings in own).
Tutor reads first line item.
Student reads cost.
Numeracy Tier: Money

Skill 32: Write Money in Digits

Job Setting
Babysitter: writing price tags for garage sale

Task Set
• Write prices as digit numbers.

Documents
• Label (Price Tag)

Tools
• Marker, sticky tags

Tutor Preparation
• Prepare list of underlined vocabulary from script page.

Checklist
Prices written correctly? □ _________________________

Tips
• Be sure that the student uses two digits to write cent values. For example, four dollars and two cents is $4.02 and not $4.2.
• Cents without dollars can be written with either a cent sign or a dollar sign.
• Some cultures use a comma rather than a decimal to separate dollars and cents. Be sensitive to the fact that this is acceptable in those cultures, but insist that the student use the decimal for this skill.

To Retest
• Use the same job setting. Just vary the prices dictated.

☐ You have shown that you can write money in digits. You may highlight Skill 32 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with writing money in digits would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
It’s important that we know how to write money as digit numbers. You will practise this skill in this new activity. It's called “Write Money in Digits.”

Here is the job setting.
I am a nanny, and you are my trainee. We are helping the children in our care get ready for a garage sale. They will be selling their old toys.

The children have told us how much to charge for each of their toys. You will make the price tags using this marker and these stickers.

- **Show stickers.**
- **Give black marker.**

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

- **Help the student highlight each of the underlined vocabulary items above.**
- **Beside each item, he should write or draw something to aid memory if needed.**

Now let's get back to the job setting!
I'll tell you the prices, and you write them on the stickers if you can.

Make one price tag for **seventeen cents.** (RESPONSE)

- **If the student is willing to try, let him make all the price tags listed below before commenting on any errors.**
  - a dollar and twenty-five cents
  - two dollars
  - eight cents
  - five dollars and ten cents
  - twenty-five cents
  - one dollar and forty-five cents

- **If the student is unsure how to write the price tags, help him get started and then fade out help as you are able.**

Now that's the end of this job activity!
Give me a moment to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 32

<table>
<thead>
<tr>
<th>New Numeracy Skill: Write Money Amount in Digit Numbers (under one thousand dollars)</th>
</tr>
</thead>
</table>

Learning/Practice Activities: Tutor/Student

**Skill: Write cent amounts as digit numbers with cent sign.**
Tutor says cent amount.
Student writes number digit numbers.
Student writes cent sign.

**Skill: Write cent amounts as digit numbers with dollar sign.**
Tutor says cent amount.
Student writes dollar sign.
Student writes decimal point.
Student writes two-digit digit number.

**Skill: Write dollar amounts (no cents).**
Tutor says dollar amount.
Student writes dollar sign.
Student writes digit number.
Student writes decimal point.
**Student writes two zeros.**

**Skill: Write dollar and cent amount.**
Tutor says dollar and cent amount.
Student writes dollar sign.
Student writes digit number.
Student writes decimal point.
Student writes cent amount with two digits.
**Numeracy Tier: Money**

**Skill 33: Sort, Name, and Tell the Value of Cash Denominations**

**Job Setting**  
Daycare worker: teaching children about money

**Task Set**
- Sort cash into denominations.
- Find name of cash on each denomination.
- Line up cash from left to right in descending order of value.
- Name denominations.
- Read denomination names from cash.
- Tell value of denominations.

**Documents**
- Cash

**Tools**
- None

**Tutor Preparation**
- Prepare “Donations Envelope” (See “Supplies, Materials, and Resources Needed” in Introduction).
- Prepare list of underlined vocabulary from script page.

**Checklist**
- Correct sorting into bills and coins? □
- Correct sorting into single sets? □
- Correct cash line-up? □
- Correct naming of denominations? □
- Correct values for denominations? □

**Tips**
- Don’t accept answers like “cent” instead of “penny,” or “twenty-five cents” for “quarter” when asked for denomination names. The student needs to know the difference between currency names and their values. Currency names can be read on most denominations. Point them out if needed.

**To Retest**
- Reuse original job setting.

- You have shown that you can sort, name, and tell the value of cash denominations. You may highlight Skill 33 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.
- More practice with sorting, naming and telling the value of cash denominations would be helpful. Let’s look at some learning and practice activities. We will focus on (area of difficulty).
Skills for Jobs – Job Numeracy

Script: Skill 33

The next few activities in your MONEY TIER are about handling cash. Handling cash is an important skill in many situations. What experience have you had handling cash? (RESPONSE and DIALOGUE)

In this activity you will show what you know about coins and bills in Canadian cash. The title of the activity is “Sort, Name, and Tell the Value of Cash Denominations.”

Here is the job setting.
I am a daycare worker, and you are my trainee. People at work have been collecting money for a co-worker who has lost his home in a fire. Many parents in the daycare have donated money also. The children are very interested in this and you are teaching them about money as donations come in.

It will soon be time to show the children the money that has been collected. You will be taking the money out of this donations envelope. You will be sorting it, and lining it up on the table in order of its value.

Show donations envelope.

You will also be answering some questions from the kids. To be sure that you are ready to teach the children about money in this way, you and I are going to practise first.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.
Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw something to aid memory if needed.

Now let's get back to the job setting and to our practice.
Here is the donations envelope. You will be taking the money out and separating it into bills and coins. Can you do that? (RESPONSE)

If the student is willing, let him sort all the money. If he makes an error, wait until he has finished and then point it out.

If the student is not able to do the job, sort the money for him.

Now put the cash back together again and sort it differently. This time, sort it into separate denominations. (RESPONSE)
Respond as above.

Now line up the cash up from left to right starting with the most valuable denomination on the left. Go ahead if you are able. (RESPONSE).
Respond as above.

Now I will pretend to be one of the kids and ask you some questions about the cash.
First, what are the names of each of those different kinds of cash? (RESPONSE)
Correct if needed.
Which kind of cash is the most money? (RESPONSE)
Correct if needed.
Tell me how much money each kind is. (RESPONSE)
Correct if needed.

That's the end of this job activity! Now give me a few moments to make my notes, and we'll see what's next.
New Numeracy Skill: Sort, Name, and Tell the Value of Cash Denominations

Learning/Practice Activities:
Tutor/Student
Skill: Sort denominations into two groups: bills and coins.
  Tutor provides one of each Canadian cash denomination up to hundred-dollar bill (real money if possible).
  Student separates paper from metal.

Skill: Sort cash into separate denominations.
  Tutor provides one of each Canadian cash denomination up to hundred-dollar bill (real money if possible).
  Student separates paper money by colour.
  Student separates metal money by size and colour.

Skill: Find value written on each Canadian denomination.
  Tutor provides one of each Canadian cash denomination up to hundred-dollar bill (real money if possible).
  Student finds and reads digit number written on denomination (except for loonie).
  Student finds and reads unit word, “cent(s)” or “dollar(s)”. 

Skill: Line up denominations in order of value from left to right starting with biggest value.
  Tutor provides one of each Canadian cash denomination up to hundred-dollar bill (real money if possible).
  Student selects largest denomination and puts it on the left.
  Student selects each smaller denomination and builds line from left to right.

Skill: Name Canadian denominations
  Tutor provides one of each Canadian cash denomination up to hundred-dollar bill (real money if possible).
  Student names bills.
  Student names toonie and loonie.
  Student names cent coins.

Enrichment Activities:
Tutor/Student
Have a coin hunt (oldest coin, most interesting picture, anniversary coin, etc.). This encourages looking at coin faces and allows an opportunity to use coin names, read dates, use some math to compare coins, etc. Canadian quarters are particularly fun to use because they are so variable. Similarly, encourage the student to bring in coins from another culture. You can talk about their values and how they relate to our currency.

Enrichment Activities: Website Interactive
Skill: Compare values of denominations in currencies from different countries.
Website 12A
Enter address: http://www.thatquiz.com/
Click on “Money.”
Click on “Coin Guide.”
Numeracy Tier: Money

Skill 34: Count Denomination Sets

Job Setting
Daycare worker: teaching children about money

Task Set
- Sort currency.
- Line up currency in order.
- Name kinds of cash.
- Evaluate kinds of cash.
- Skip-count bills and coins of same sets.

Documents
- Cash

Tools
- None

Tutor Preparation
- Prepare “Donations Envelope” with seven of each denomination.

Checklist
- Cash sorted correctly?
- Denomination names found?
- Cash lined up correctly?
- Cash named correctly?
- Cash evaluated correctly?
  - Bills counted correctly? □ twenties □ tens □ fives
  - Coins counted correctly? □ toonies □ loonies □ half-dollars
    □ quarters □ dimes □ nickels □ pennies

Tips
- None

To Retest
- Reuse original job setting but vary cash sets in envelope.

☐ You have shown that you can count denomination sets. You may highlight Skill 34 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting denomination sets would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is also about handling cash. It is called “Count Denomination Sets.”

The job setting is the same as the last activity.
I am a daycare worker and you are my trainee. This time you will be counting each set of cash from the donations envelope out loud to find the total. You will be able to skip-count the money out loud by ones, twos, fives, tens, twenties, or twenty-fives because these numbers are the denomination values. Before you count for the kids, you will practise with me.

Here is the donations envelope. It has more money in it than it did last time.
You can begin by sorting the money into denomination sets and lining them up on the table as before. Put them from left to right in order of greatest to least value. (RESPONSE)

Okay. Now it's time to practise skip-counting the denominations aloud. Start by skip-counting the set of twenty-dollar bills to see how much money they make in total. (RESPONSE)

If the student is able, let him skip-count alone.

If he is unsure what to do, demonstrate for him

And now skip-count the other sets of bills and coins out loud too. Go in order from left to right. (RESPONSE)

Respond and help as above.

That's the end of this job activity!
Now give me a moment to make my notes, and then we'll see what's next.
New Numeracy Skill: Count Denomination Sets

Learning/Practice Activities:
Tutor/Student

Skill: Skip-count nickels.
  Tutor provides number of nickels.
  Student skip-counts aloud by fives to total.

Skill: Skip-count dimes.
  Tutor provides number of dimes.
  Student skip-counts aloud by tens to total.

Skill: Skip-count quarters.
  Tutor provides number of quarters.
  Student skip-counts aloud by twenty-fives to total.

Skill: Skip-count loonies.
  Tutor provides number of loonies.
  Student counts aloud to total.

Skill: Skip-count toonies.
  Tutor provides number of toonies.
  Student skip-counts aloud by twos to total.

Skill: Skip-count five-dollar bills.
  Tutor provides number of five-dollar bills.
  Student skip-counts aloud by fives to total.

Skill: Skip-count ten-dollar bills.
  Tutor provides number of ten-dollar bills.
  Student skip-counts aloud by tens to total.

Skill: Skip-count twenty-dollar bills.
  Tutor provides number of twenty-dollar bills.
  Student skip-counts aloud by twenties to total.

Skill: Skip-count fifty-dollar bills.
  Tutor provides number of fifty-dollar bills.
  Student skip-counts aloud by fifties to total.

Skill: Skip-count hundred-dollar bills.
  Tutor provides number of hundred-dollar bill.
  Student skip-counts aloud by hundreds to total.
Learning/Practice Activities:
Website Interactive

Skill: Count single sets of coins with total value under one dollar.

Website 12A
Enter address: http://www.thatquiz.com
Click on “Money.”
Click on “Canada.”
Click on “Length” to set number of questions.
Click on “Level” to set to “Level 1.”
Click on “Timer” to set to “none.”
Type digit number for number of cents for total coin set.

Enrichment Activities:
Website Interactive

Skill: Count single sets of coins with total value under one dollar (time limit).
Use Website 12A as above, but set timer for time limit.
Numeracy Tier: Money

Skill 35: Add and Record Money Using a Calculator

Job Setting
Cashier: filling out cash sheet

Task Set
- Count denomination items.
- Record numbers of each denomination beside denomination name.
- Skip-count each denomination to find its value.
- Record each denomination total.
- Find grand total using a calculator.
- Copy money total from calculator display.

Documents
- Form (Cash Sheet)
- Cash

Tools
- Calculator
- Pencil with eraser

Tutor Preparation
- Prepare cash box (See “Supplies, Materials, and Resources Needed” in Introduction).
- Photocopy ILLUSTRATION R: Form (Cash Sheet).
- Prepare list of underlined vocabulary from script page.

Checklist
Correct number of items in cash sets? □
Correct skip-counting? □
Set totals recorded correctly? □
Correct grand total? □
Correct copy from calculator? □

Tips
- Make sure the student uses a dollar sign when copying money from the calculator display.

To Retest
- Use the same job setting. Just vary the amounts in the cash box.

□ You have shown that you can add and record money using a calculator. You may highlight Skill 35 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

□ More practice with adding and recording money using a calculator would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Add and Record Money Using a Calculator.”

Here is the job setting.
I am a cashier at an outdoor market, and you are my trainee. At the end of your workday, you will give your cash box to your boss. Here is your cash box.

**Show Cash Box.**

Have you used a cash box before? (RESPONSE and DIALOGUE)

You will also fill out a cash sheet to give to your boss. The cash sheet will show how much money is in the box. Here is the cash sheet.

**Show ILLUSTRATION R with cash sheet.**

Do you have experience using cash sheets? (RESPONSE and DIALOGUE)

You will count how many items there are of each denomination in your cash box. You will record these counts on the cash sheet and then skip-count to find and record the totals. Finally, you will use your calculator to find the grand total. You will record the grand total at the bottom.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

**Help the student highlight each of the underlined vocabulary items above.**

Beside each item he should write or draw something to aid memory if needed.

Now let's get back to the job setting! Here is a pencil for recording your numbers.

**Give pencil with eraser.**

Start by sorting your cash into denominations. (RESPONSE)

Now fill out the cash sheet if you are able. (RESPONSE)

**Let the student fill out the sheet unaided if he feels able to try. Point out errors, if any, when he is done.**

If the student feels unable to fill out the sheet, help him get started and fade out help as you are able using the following sequence:

- Count number of items of one cash denomination.
- Record that number to the left of the denomination value.
- Put out number of fingers equal to number of cash items counted.
- Skip-count with fingers to find total cash value of cash set.
- Record the total in digits.

Now add the totals that you have written on the calculator to get the grand total. (RESPONSE)

**Help if needed.**

Finally, copy the grand total from the calculator display onto the cash sheet. (RESPONSE)

**Help as needed.**

That's the end of this job activity!

Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 35

New Numeracy Skill: Add and Record Money Using a Calculator

Learning/Practice Activities:
Tutor/Student

Skill: Add money on a calculator.
   Tutor dictates two money amounts.
   Student enters addition number sentence on calculator.
   Student reads total from calculator display.

Skill: Record money from calculator display.
   Tutor dictates two money amounts.
   Student enters addition number sentence on calculator.
   Student copies total from calculator display on scrap paper using money notation.

Learning/Practice Activities:
Website Interactive

Skill: See money addition number sentence, add on calculator.
   Website 1Ad
   Enter address: http://www.aaaknow.com
   Click on “Money.”
   Click on “Add Money.”
   Scroll down to page 2.
   Click on “Start.”
   Type digit number in answer box to show total.
   See box below for feedback.

Enrichment Activities:
Website Interactive

Skill: See money addition number sentence, add on calculator.
   Use Website 1Ad as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Money

Skill 36: Count Mixed Cash

Job Setting
Visiting homemaker: preparing to shop

Task Set
- Select largest denomination.
- Skip-count same denomination if needed.
- Add next largest denomination.
- Skip-count this denomination if needed.
- Continue to total.
- Say total.

Documents
- Cash

Tools
- None

Tutor Preparation
- Prepare cash wallet (See “Supplies, Materials and Resources Needed” in Introduction).
- Prepare list of underlined vocabulary from script page.

Checklist
Correct total independently? ☐
Help needed to reach total? ☐

Tips
- Your student does not need to count out loud in this activity unless he wants to because he is counting for himself, not for others.

To Retest
- Reuse original job setting, but vary the amount in the Cash Wallet.

☐ You have shown that you can count mixed cash sets. You may highlight Skill 36 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting mixed cash sets would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Count Mixed Cash.” A mixed set of cash is what you probably have in your wallet—bills and coins of different denominations. Here is the wallet with mixed cash that you will use in this activity.

Show cash wallet.

Here is the job setting.
I am a visiting homemaker and you are my trainee. Our client, Vivian, isn’t able to do her own shopping, so she has sent you to the mall to do it for her. She has given you her wallet full of cash and a list of things to buy. Before you start shopping, you need to look in the wallet to see how much money you have in total to buy things.

Before continuing, let’s take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw something to aid memory if needed.

Now let’s get back to the job activity!
Can you count the cash in the wallet yourself and tell me the total? (RESPONSE)

If the student is able to count alone, let him do it any way he wishes and then say the total out loud.

If the student’s total is incorrect, or if he is unable to total the cash, model the count out loud for him:

Skip-count the set with the largest value.
Add one of the next largest denomination.
Count forward in that denomination.
Add one of next largest denomination etc. to total.

That’s the end of this job activity!
Now give me a few moments to make my notes, and then we’ll see what’s next.
New Numeracy Skill:  Count Mixed Cash

Learning/Practice Activities:
Tutor/Student
COUNT MIXED DENOMINATIONS UNDER $1

ADD ON PENNIES
Skill: Count nickels and pennies.
  Tutor puts out array of nickels and pennies.
  Student skip-counts nickels; counts on with pennies.

Skill: Count dimes and pennies.
  Tutor puts out array of dimes and pennies.
  Student skip-counts dimes; counts on with pennies.

Skill: Count quarters and pennies.
  Tutor puts out array of quarters and pennies.
  Student skip-counts quarters; counts on with pennies.

ADD ON NICKELS
Skill: Count dimes and nickels.
  Tutor puts out array of dimes and nickels.
  Student skip-counts dimes; counts on with nickels.

Skill: Count quarters and nickels.
  Tutor puts out array of quarters and nickels.
  Student skip-counts quarters and resumes counting nickels by fives.

ADD ON DIMES.
  Tutor puts out array of quarters and dimes.
  Student skip-counts quarters; counts on with dimes.

COUNT OTHER MIXED DENOMINATIONS

ADD ON LOONIES
Skill: Count toonies and loonies.
  Tutor puts out array of toonies and loonies.
  Student skip-counts toonies; counts on with loonies.

Skill: Count five-dollar bills and loonies.
  Tutor puts out array of five-dollar bills and loonies.
  Student skip-counts five-dollar-bills; counts on with loonies.

Skill: Count ten-dollar bills and loonies.
  Tutor puts out array of ten-dollar bills and loonies.
  Student skip-counts ten-dollar; counts on with loonies.

Skill: Count twenty-dollar bills and loonies.
  Tutor puts out array of twenty-dollar bills and loonies.
  Student skip-counts twenty-dollar; counts on with loonies.
Skill: Count fifty-dollar bills and loonies.
   Tutor puts out array of fifty-dollar bills and loonies.
   Student skip-counts fifty-dollar; counts on with loonies.

ADD ON TOONIES
Skill: Count five-dollar bills and toonies.
   Tutor puts out array of five-dollar bills and toonies.
   Student skip-counts five-dollar bills; counts on with toonies.

Skill: Count ten-dollar bills and toonies.
   Tutor puts out array of ten-dollar bills and toonies.
   Student skip-counts ten-dollar bills; counts on with toonies.

Skill: Count twenty-dollar bills and toonies.
   Tutor puts out array of twenty-dollar bills and toonies.
   Student skip-counts twenty-dollar; counts on with toonies.

Skill: Count fifty-dollar bills and toonies.
   Tutor puts out array of fifty-dollar bills and toonies.
   Student skip-counts fifty-dollar bills; counts on with toonies.

ADD ON FIVE-DOLLAR BILLS
Skill: Count ten-dollar bills and dollar bills.
   Tutor puts out array of ten-dollar bills and five-dollar bills.
   Student skip-counts ten-dollar bills; counts on with five-dollar bills.

Skill: Count twenty-dollar bills and five-dollar bills.
   Tutor puts out array of twenty-dollar bills and five-dollar bills.
   Student skip-counts twenty-dollar bills; counts on with five-dollar bills.

Skill: Count fifty-dollar bills and five-dollar bills.
   Tutor puts out array of fifty-dollar bills and five-dollar bills.
   Student skip-counts fifty-dollar bills; counts on with five-dollar bills.

ADD ON TEN-DOLLAR BILLS
Skill: Count twenty-dollar bills and ten-dollar bills.
   Tutor puts out array of twenty-dollar bills and ten-dollar bills.
   Student skip-counts twenty-dollar bills; counts on with ten-dollar bills.

Skill: Count fifty-dollar bills and ten-dollar bills.
   Tutor puts out array of fifty-dollar bills and ten-dollar bills.
   Student skip-counts fifty-dollar bills by fifties and resumes counting ten-dollar bills by tens.

ADD ON TWENTY-DOLLAR BILLS
Skill: Count fifty-dollar bills and twenty-dollar bills.
   Tutor puts out array of fifty-dollar bills and twenty-dollar bills.
   Student skip-counts fifty-dollar bills; counts on with ten-dollar bills.
Learning/Practice Activities:
Website Interactive

Skill: Count mixed sets of coins (see pictures) with total value under one dollar.
Website 12A
Enter address: http://www.thatquiz.com
Click on “Money.”
Click on “Canada.”
Click on “Length” to set number of questions.
Click on “Level” to set to “Level 2, 3, 4.”
Click on “Timer” to set to “none.”
Type digit number for number of cents for total coin set.

Skill: Count mixed sets of coins (see pictures) with total value under and over one dollar.
Website 12A
Enter address: http://www.thatquiz.com
Click on “Money.”
Click on “Canada.”
Click on “Length” to set number of questions.
Click on “Level” to set to “Level 5, 6, 7, 8, 9, 10.”
Click on “Timer” to set Timer to “none.”
Type digit number for number of cents or dollars and cents for total coin set.

Enrichment Activities:
Website Interactive

Skill: Count mixed sets of coins (see pictures) (time limit).
Use Website 12A as above, but drag down menu to set Timer as desired before clicking on “Start.”

Skill: Count mixed sets of coins and bills (see names only).
Website 12A
Enter address: http://www.thatquiz.com
Click on “Money.”
Click on “Canada.”
Click on “Length” to set number of questions.
Click on “Level” to set to “Level 11, 12, 13, 14, 15.”
Click on “Timer” to set Timer to “none.”
Type digit number for number of cents or dollars and cents for total set.

Skill: Count mixed sets of nickels and pennies (see names only).
Website 1Ae
Enter address: http://www.aaaknow.com
Click on “Money.”
Click on “Adding Nickels and Pennies.”
Scroll down to page 2.
Click on “Start.”
Type digit number in answer box to show total.
Click on “Check.”
See box below for feedback.
Skill: Count mixed sets of dimes and pennies (see names only).

Website 1Af

Enter address: [http://www.aaaknow.com]
Click on “Money.”
Click on “Adding Dimes and Pennies.”
Scroll down to page 2.
Click on “Start.”
Type digit number in answer box to show total.
Click on “Check.”
See box below for feedback.

Skill: Count mixed sets of dimes, nickels, and pennies (see names only).

Website 1Ag

Enter address: [http://www.aaaknow.com]
Click on “Money.”
Click on “Adding Dimes, Nickels and Pennies.”
Scroll down to page 2.
Click on “Start.”
Type digit number in answer box to show total.
Click on “Check.”
See box below for feedback.

Skill: Count mixed sets of quarters, dimes, nickels, and pennies (see names only).

Website 9A

Enter address: [http://www.quia.com]
Click on “Student Zone.”
Click on “Shared Activities.”
Click on “Mathematics.”
Click on “Counting Change.”
Click on two boxes with matching number words and digit numbers.
Pictures will reveal good match.
**Numeracy Tier: Money**

**Skill 37: Accept or Reject Cash Payment**

**Job Setting**
Cashier: receiving cash payment

**Task Set**
- Count mixed cash.
- **Read cash register display.**
- **Compare with cash given.**
- Accept or reject payment.

**Documents**
- Cash
- Sign (Cash Register Display)

**Tools**
- Cash register

**Tutor Preparation**
- Photocopy ILLUSTRATION S: Sign (Cash Register Display: amount owing).
- Prepare four sets of cash to make the four payments shown. (Include exact payments, overpayments, and underpayments).
- Prepare list of underlined vocabulary from script page.

**Checklist**

- Correct totals said aloud?  
  □ ______________________
- Correct payment decisions?  
  □ ______________________
- Correct comment to customer?  
  □ ______________________

**Tips**
- This activity requires the student to combine numeracy and oral communication skills. It is a multi-step task. The student may need to see the sequence modelled before catching on.

**To Retest**
- Photocopy ILLUSTRATION T: Sign (Cash Register Display: amount owing; retest) to reuse original job setting. Put different amounts in the cash register display windows.

☐ You have shown that you can accept or reject a cash payment. You may highlight Skill 37 on the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with accepting or rejecting cash payment would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Accept or Reject Cash Payment.”

Here is the job setting.
I am a cashier in a clothing store, and you are my trainee. When customers come with cash to pay, you must be able to count their cash out loud, compare it with the cash register total of what they owe, and decide whether to accept or refuse their payment. Whether you decide to accept or refuse it, you must respond to the customer politely. To make sure that you are ready to do this when the customers come, I will give you some practice first.

Before continuing, let’s take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above. Beside each item, he should write or draw something to aid memory if needed.

Now back to the job setting!
Here are four different cash registers for four different customers.

Show ILLUSTRATION S with cash registers showing amount owing.

Each cash register display tells the amount the customer owes. I will put each customer’s cash on the table. You will count it out loud, compare it with the amount owed and decide whether to accept it or reject it. If you are accepting it, say “Thank you.” If you are rejecting it, say, “I’m sorry” and then remind the customer of the amount owing.

Let’s try the first one. Here is the customer’s cash on the table.

Put the offered payment on the table.

Count the cash aloud and respond politely. (RESPONSE)

If the student does this job independently, let him continue to the end.
If he makes an error, or doesn’t know how to proceed, model the appropriate counting behaviour and response for him and discuss your method.
Continue as above for the other three boxes.

That’s the end of this job activity.
Now give me a moment to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 37

New Numeracy Skill: Accept or Reject Cash Payment

Learning/Practice Activities:
Tutor/Student

Skill: Decide if payment offered is sufficient, and respond politely.
   Tutor writes amount owed as digit number.
   Tutor offers cash payment (vary amounts exact/overpayment/underpayment).
      Student counts cash aloud.
      Student compares cash amount with amount written.
      Student responds politely to accept or reject payment (does not offer change).
Numeracy Tier: Money

Skill 38: Write Money in Words on Financial Documents

Job Setting
Cleaner: completing receipt for payment

Task Set
- Count cash payment aloud.
- Write cash total as digit number.
- Write cash total in words using financial format.
- Circle the word “Cash.”
- Sign name.

Documents
- Form: (Receipt Blank)

Tools
- Pen
- Pencil with eraser
- Scrap paper

Tutor Preparation
- Photocopy ILLUSTRATION U: Form (Receipt blank). Fill in the “DATE” line, “RECEIVED FROM” line and “FOR” line to fit the Script.
- Bring in a real receipt form (receipt blank).
- Prepare to discuss why a receipt for money received is a necessary document.
- Prepare list of underlined vocabulary from script page.

Checklist
- Cash counted aloud correctly?
- Total written correctly as digit number?
- Total written correctly in words?
- “Cash” circled?
- Signature legible?

Tips
- The student needs to know that good penmanship is needed on financial documents.

To Retest
- Use the same job setting but vary the amount of cash.

☐ You have shown that you can write money in words on financial documents. You may highlight Skill 38 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.
☐ More practice with writing money amounts on financial documents would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Write Money in Words on Financial Documents.” Recently you showed that you could read a cash register receipt to a customer. A receipt is proof that money has changed hands. In this activity you will be using a different kind of receipt. This is a receipt that we fill out by hand when people give us money in a business situation. We usually write the receipt on a receipt form. Here is an example of a receipt form.

**Show real receipt form.**

Let's talk about some situations when people write receipts like this. (DIALOGUE)

When you fill out a receipt form, you write the amount of money as a digit number and again in words. There is a special format that is often used. This format is also used on other financial documents such as cheques.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

- Help the student highlight each of the underlined vocabulary items above.
- Beside each item he should write or draw something to aid memory if needed.

Now Here is the job setting.

I am a cleaner, and you are my trainee. Our client, John Brown, is paying cash for the cleaning we have done. You will count the money that he is paying. Then you will fill out a receipt for him as proof of payment. You will write the amount he is paying as a digit number and in words. Then you will sign your name. I have already filled out most of the receipt for you.

**Give ILLUSTRATION U with receipt form partially filled in.**

Here is the cash payment from Mr. Brown. Count the cash and say the total. (RESPONSE)

Now you will be writing that amount in pen because a receipt is a financial document. Before you use pen on the receipt, print the amount of cash in pencil on this piece of scrap paper. Print it first in digits and then in words. (RESPONSE)

- Give pencil and scrap paper.
- Affirm correct responses.
- Help as needed.

Now you may copy the money amounts in pen on the receipt. (RESPONSE) You are giving a receipt for cash payment, so circle the word “Cash.” (RESPONSE)

- Help if needed.

Fine. Now finish by signing your name. (RESPONSE)

That's the end of this job activity!
Now give me a few moments to make my notes and then we'll see what's next.
Subskills and Resources: Skill 38

**New Numeracy Skill: Write Money in Words on Financial Documents**

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Write dollar amount (no cents) in words on financial documents.**
- Tutor provides receipt form filled in with dollar amount (no cents) in words.
- Student writes digit number for dollar amount.
- Student draws line to right.
- Student writes xx/100 at end of line.
- Student writes “dollars.”

**Skill: Write dollar and cent amount in words on financial documents.**
- Tutor provides receipt form filled in with dollar and cent amount in words.
- Student writes digit number for dollar amount.
- Student draws line to right.
- Student writes cent amount as digit number/100.
- Student writes “dollars.”
- Student compares estimate with actual total as exact, overestimate, or underestimate.

**Learning/Practice Activities:**

**Website Interactive**

**Skill: Match money in words with money in digit numbers.**

**Website 5B**
- Enter address: [http://www.english-zone.com/](http://www.english-zone.com/)
- Click on “Money” under “Basic Skills Zone.”
- Click on “Money Honey!”
- Pull down menu to see digit number matches to money in words.
- Click on answer matches.
- Click on “Check” when all matches made.
- Look in boxes for feedback.

**Enrichment Activities:**

**Tutor/Student**

**Skill: Write money amount in words on cheques.**
- Tutor provides cheque form filled in except for money amounts and signature.
- Student writes amount as digit number.
- Student writes amount in words following format.
- Student signs cheque.
Numeracy Tier: Money

Skill 39: Select Exact Cash

Job Setting
Cashier: selecting exact cash to give change

Task Set
- Read cash register display.
- Select denomination to match, or undershoot as little as possible, cash register total.
- Add on aloud next denomination that will not exceed cash register total.
- Continue to final total.
- Present change and say total aloud.

Documents
- Cash
- Sign (Cash Register Display: change owing)

Tools
- Cash register

Tutor Preparation
- Photocopy ILLUSTRATION V: Sign (Cash Register Display: change owing).
- Prepare Cash Box (see page ) (see page ).
- Prepare list of underlined vocabulary from script page.

Checklist

Cash register display read correctly? □
Change selected correctly? □
Change told correctly? □

Tips
- When the student can do this skill, he can also select exact cash to pay.

To Retest
- Photocopy ILLUSTRATION W: Sign (Cash Register Display: change owing; for retest) to reuse original job setting. Enter different amounts on cash register displays to show change owing.

☐ You have shown that you can select exact cash. You may highlight Skill 39 on the MONEY TIER in your Skill Ladder.

☐ More practice with selecting exact cash would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Select Exact Cash.” You will be showing that you can pick out exactly the right bills and coins to match an amount of money.

There are many situations in life where we have to do this. In this activity, I am a cashier and you are my trainee. You will be giving exact cash to customers to match the change owing on the cash register display. When you give the change, you must do your best to use the fewest possible coins and bills. It would be possible to give change all in pennies, but that wouldn’t make our customers very happy, would it!

Before continuing, let’s take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now back to the job setting!
Here is your cash box.

Show cash box.

And here are four cash register displays showing the change owing to four different customers.

Show ILLUSTRATION V with cash register displays.

Can you put the exact change for the first cash register on the table? (RESPONSE)

If the student wants to proceed alone, let him finish. If he has made an error, count out what he has put on the table and point out the discrepancy.

If the student has selected correct change, but not with the least number of coins possible, show the better selection.

If the student needs help, show how to count out the money following this sequence:
Select denomination to match, or undershoot as little as possible, cash register total.
Add on aloud next denomination that will not exceed cash register total.
Continue to final total.

Proceed as above for the other three cash register displays.

That's the end of this activity!
Now give me a moment to make my notes, and then we'll see what's next.
New Numeracy Skill: Select Exact Cash

Learning/Practice Activities:
Tutor/Student

SELECT DOLLAR CASH

Skill: Select single coin or bill to cover total dollar value.
Tutor shows “amount owing” on scrap paper as $1.00, $2.00, $5.00, $10.00, $20.00 or $50.00.
Student gives equivalent coin or bill.

Skill: Dollar value $3 to $4
Tutor shows “amount owing” on scrap paper as dollar, no cents.
Student selects toonie.
Student selects another toonie to make $4.
Student selects loonie to make $3.

Skill: Dollar value $6 to $9
Tutor shows “amount owing” on scrap paper as dollar, no cents.
Student selects five-dollar bill.
Student trial adds toonie(s).
Student adds loonie(s) if toonies are too much.

Skill: Dollar value $11 to $19
Tutor shows “amount owing” on scrap paper as dollar, no cents.
Student selects ten-dollar bill.
Student trial adds five-dollar bill if ten is too much.
Student trial adds toonies if five is too much.
Student adds loonie(s) if toonies are too much.

Skill: Dollar value $21 to $99
Tutor shows “amount owing” on scrap paper as dollar, no cents.
Student selects twenty-dollar bills in largest multiple possible.
Student trial adds ten-dollar bill.
Student trial adds five-dollar bill if ten is too much.
Student trial adds toonie(s) if five is too much.
Student trial adds loonie(s) if toonies are too much.
SELECT CENT CASH

Skill: Select single coin or bill to cover total dollar value.
   Tutor shows “amount owing” on scrap paper as $.25, $.10, $.05, $.01.
   Student gives equivalent coin.

Skill: Cent value $.02 to $.04
   Tutor shows “amount owing” on scrap paper.
   Student selects pennies to total.

Skill: Cent value $.06 to $.09
   Tutor shows “amount owing” on scrap paper.
   Student selects nickel.
   Student selects pennies to total.

Skill: Cent value $.11 to $.24
   Tutor shows “amount owing” on scrap paper.
   Student selects dimes in largest multiple possible.
   Student trial adds nickel if dime is too much.
   Student selects pennies to total.

Skill: Cent value $.26 to $.99
   Tutor shows “amount owing” on scrap paper.
   Student selects quarters in largest multiple possible.
   Student trial adds dimes in largest multiple possible.
   Student trial adds nickel if dime is too much.
   Student selects pennies to total.

Learning/Practice Activities:
Website Interactive

Skill: Select exact cash less than $1.
Website 8A
   Enter address: http://www.netrover.com/~jjrose
   Click on “moneypete/”
   Click on “money.html”
   Click on “Easy,” “Normal,” or “Hard” to set difficulty.
   Click on a “helper character.”
   Click and drag coins to desk to match amount of money shown.
   Click on character helper for feedback.
**Numeracy Tier: Money**

**Skill 40: Exchange Denominations for Equivalent Sets**

**Job Setting**
Cashier: exchanging denominations for customers

**Task Set**
- Recognize denomination given.
- Provide equivalent in lesser denominations.

**Documents**
- Cash

**Tools**
- None

**Tutor Preparation**
- Prepare “Cash Box.”
- Prepare list of underlined vocabulary from script page.

**Checklist**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize denomination given?</td>
<td>Yes □</td>
</tr>
<tr>
<td>Provide correct change?</td>
<td></td>
</tr>
<tr>
<td>For twenty-dollar bill?</td>
<td>Yes □</td>
</tr>
<tr>
<td>For ten-dollar bill?</td>
<td>Yes □</td>
</tr>
<tr>
<td>For five-dollar bill?</td>
<td>Yes □</td>
</tr>
<tr>
<td>For toonie?</td>
<td></td>
</tr>
<tr>
<td>For loonie?</td>
<td></td>
</tr>
<tr>
<td>For quarter?</td>
<td></td>
</tr>
<tr>
<td>For dime?</td>
<td></td>
</tr>
<tr>
<td>For nickel?</td>
<td>Yes □</td>
</tr>
</tbody>
</table>

**Tips**
- None

**To Retest**
- Reuse job setting.

☐ You have shown that you can exchange denominations for equivalent sets. You may highlight Skill 40 in the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with exchanging denominations for equivalent sets would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This activity in your MONEY TIER is called “Exchanging Denominations for Equivalent Sets.” We need this skill when people ask questions such as, “Do you have change for a quarter?” In this situation, we are being asked to make a trade. People want us to take their cash and give them the same amount of money in smaller denominations. Can you think of some situations where you may have to ask for change? (DIALOGUE)

Here is the job setting for this activity:
I am a cashier in a convenience store, and you are my trainee. Customers will often ask the cashier to change larger denominations when they pay. I want to make sure that you have the skills to do this for them.

Before continuing, let's take a moment to highlight the vocabulary in your glossary:
Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now let's get back to the job activity!
I will pretend to be some customers asking for change, and you will be the cashier. You may use the money in the cash box to trade with the customer. Here we go!

Excuse me. Could you give me change for a nickel while I'm here? (RESPONSE)
If the student responds by giving correct change, affirm it.
If he is unable to make change, show him how to do so.

Excuse me. Could you give me change for a dime while I'm here? (RESPONSE)
If the student responds by giving correct change, affirm it.
Discuss other possible change combinations
If he is unable to make change, show him how to do so.

Excuse me. Could you give me change for a quarter while I’m here? (RESPONSE)
Respond as for dime.

Excuse me. Could you give me change for a fifty-cent piece while I’m here? (RESPONSE)
Respond as for dime.

Excuse me. Could you give me change for a loonie while I'm here? (RESPONSE)
Respond as for dime.

Excuse me. Could you give me change for a toonie while I'm here? (RESPONSE)
Respond as for dime.

Excuse me. Could you give me change for a five while I'm here? (RESPONSE)
Respond as for dime.

Excuse me. Could you give me change for a ten while I’m here? (RESPONSE)
Respond as for dime.

Excuse me. Could you give me change for a twenty while I’m here? (RESPONSE)
Respond as for dime.

That’s the end of this job activity!
Now give me a few minutes to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 40

**New Numeracy Skill: Exchange Denominations for Equivalent Sets**

**Learning/Practice Activities:**
Tutor/Student

**Skill: Exchange cash item for smaller denominations (least number).**
Tutor gives cash item.
Student says value of cash item.
Student matches value following process in Skill 39:
Select denomination to undershoot as little as possible.
Add on aloud next denomination that will not exceed total.
Continue to final total.

**Results will be as follows:**
Exchange for hundred-dollar bill: two fifties
Exchange for fifty-dollar bill: two twenties and a five
Exchange for twenty-dollar bill: two tens
Exchange for five-dollar bill: two toonies and a loonie
Exchange for toonie: two loonies
Exchange for loonie: four quarters
Exchange for quarter: two dimes and a nickel
Exchange for dime: two nickels
Exchange for nickel: five pennies

**Enrichment Activities:**
Website Interactive

**Skill: Convert dimes, nickels, and pennies.**

**Website 1Ah**

Enter address: [http://www.aaaknow.com](http://www.aaaknow.com)
Click on “Money.”
Click on “Converting Coin Values.”
Scroll down to page 2.
Type digit number to answer question.
Click on “check.”
See below for feedback.
Numeracy Tier: Money

Skill 41: Estimate Whether You Have Enough Money

Job Setting
Babysitter: estimating total before paying

Task Set
- Round item costs to dollars.
- Add estimated costs mentally.
- Count cash in wallet.
- Compare estimate to cash on hand and decide about paying.

Documents
- Sign (Menu)
- Cash

Tools
- None

Tutor Preparation
- Photocopy ILLUSTRATION X: Sign (Menu Board).
- Prepare cash wallet.
- Prepare to review rounding off numbers (SKILL 29).
- Prepare list of underlined vocabulary from script page.

Checklist

Item costs rounded correctly?    □    ______
Total estimated correctly?      □    ______
Cash counted correctly?          □    ______
Correct decision re paying?      □    ______

Tips
- Explain to the student that rounded costs could exceed actual costs. This needs to be taken into account when comparing with cash on hand. They should always have more than the estimated cost on hand before buying.

To Retest
- Reuse original job setting, but vary cash amounts in wallet.

☐ You have shown that you can estimate whether you have enough money. You may highlight Skill 41 on the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with estimating whether you have enough money would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Estimate Whether You Can Afford to Pay.” Before you buy things, it is always a good idea to guess how much it will cost altogether. Then you can check to see if you have enough money to pay. If you don’t think ahead, it could be embarrassing! Has this ever happened to you? (DIALOGUE)

Here is the job setting.
I am a nanny, and you are my trainee. We are taking Susie, the child in our care, to a fast-food restaurant. Before we order we will look at this menu.

Show ILLUSTRATION X with menu.
You will estimate the total cost of our order from the menu, and then check to see if we have enough cash in the wallet.

Show cash wallet.

You will use rounding off to estimate the total cost. You may remember rounding off the number of T-shirts when you were a sewing machine operator and were finding your total piecework count. In this activity, you will round off menu costs to dollars only. Then you will add the rounded costs in your head to get an approximate total.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.
Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now let's get back to the job setting!
We are thinking of buying Susie a hamburger, apple slices, and a milkshake.
What will the rounded price for the hamburger be? (RESPONSE)
Affirm correct answer.
If answer is incorrect, or if the student doesn't know how to answer, show how to round to the nearest dollar.

And the rounded price for the apple slices? (RESPONSE).
Respond as above.
And how about the milkshake? (RESPONSE).
Respond as above.

Now add the three rounded prices together in your head or on your fingers and tell me the total. (RESPONSE)
Affirm correct answer.
Prompt with the rounded numbers if the student has forgotten.
If the student has made a mistake or can't add up, demonstrate for him mentally or using fingers.

Now, count how much is in the wallet. (RESPONSE)
Do you think we have enough money to pay today? (RESPONSE)
Prompt with rounded total if needed.
Discuss adequacy of money supply.

That's the end of this activity!
Now give me a minute to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 41

<table>
<thead>
<tr>
<th>New Numeracy Skill: Estimate Total Cost by Rounding</th>
</tr>
</thead>
</table>

**Learning/Practice Activities:**

**Tutor/Student**

**Skill:** Round money amount to last digit on the left and add mentally.
- Tutor gives prices in writing in digit numbers.
- Student rounds each to last digit on left.
- Student adds rounded prices mentally.
Numeracy Tier: Money

Skill 42: Estimate Food Prices

Job Setting
Visiting homemaker: estimating prices before shopping

Task Set
- Guess item costs.
- Total estimated costs mentally.
- Say estimated total cost.
- Read receipt total.
- Compare estimate with receipt total.

Documents
- Form (Store Receipt)
- List (Grocery)

Tools
- None

Tutor Preparation
- Select real grocery receipt for a few items.
- Print by hand a grocery list to match the items on the receipt.
- Prepare list of underlined vocabulary from script page.

Checklist
- Total cost estimate said aloud? □ ___ __________
- Receipt total read correctly? □ ___ __________
- Estimate compared with actual correctly? □ ___ __________

Tips
- Estimating costs is an art. Reinforce the student strongly for trying even if the guess is far off. Your student should feel successful about his guess, whatever it is, but if he guesses wildly off the mark, suggest more practice.

To Retest
- Reuse original job setting. Use different receipt, and print grocery list to match by hand.

☐ You have shown that you can estimate food prices. You may highlight Skill 42 on the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with estimating food prices would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
Here is another chance to practise being a smart shopper. You will be guessing how much money you need to take with you when you go grocery shopping. Then you will read a receipt to see how close your guess was to the real cost of all those items. The activity is called “Estimate Food Costs.”

Here is the job setting.
I am a visiting homemaker, and you are my trainee. You will be doing grocery shopping for our client, Sadie, and you will need to know each time how much money to take to cover the costs.

To practise, you will look at Sadie's grocery list and guess how much the items on the list will cost altogether. Then you will read the total on the receipt for these groceries to see if your estimate was exactly right, an overestimate, or an underestimate. Estimating isn't always easy, so don't worry if your guess is far from the exact number. Let's just have fun with it!

Here is Sadie's grocery list.

Show handwritten list you have prepared.

How much money do you estimate you will need to take for this shopping? (RESPONSE)

If student is reluctant to guess, help him estimate each item as a rounded amount and add the amounts mentally.

Now here is a receipt for the items on this list. What was the actual total cost? (RESPONSE)

Help the student find the total line if he needs prompting.

So was your guess just right, and overestimate, or an underestimate? (RESPONSE)

That's the end of this job activity!
Now give me a minute to make my notes, and then we'll see what's next.

Subskills and Resources: Skill 42

New Numeracy Skill: Estimate Food Prices

Learning/Practice Activities:
Tutor/Student

Skill: Estimate food prices for individual items (round to last digit on left).
Tutor makes list of prices from newspaper food ads.
Tutor tells student food specifics.
Student estimates cost to last digit on left.
Tutor provides actual price from ad.
Student tells whether he overestimated, underestimated, or was correct.

Reverse roles so that the tutor is guessing and the student is posing the question from food ads that he has brought in himself.
Numeracy Tier: Money

Skill 43: Count Out Exact Change Without a Calculator

Job Setting
Food and beverage server: counting out change

Task Set
- Count cash received.
- Read item price from menu.
- Count out change aloud.

Documents
- Sign (Menu)
- Cash

Tools
- None

Tutor Preparation
- Photocopy ILLUSTRATION X: Sign (Menu Board).
- Prepare cash box.
- Have ready a ten-dollar bill and two twenty-dollar bills to “pay.”
- Prepare list of underlined vocabulary from script page.

Checklist
Payment counted correctly? □ _________________________
Item price read correctly? □ _________________________
Change selected correctly? □ _________________________
Change counted out correctly? □ _________________________

Tips
- None

To Retest
- Reuse original job setting, but vary item chosen for purchase.

☐ You have shown that you can count out exact change without a calculator. You may highlight Skill 43 on the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with counting out exact change without a calculator would be helpful. Let’s look at some learning and practice activities. We will focus on (area of difficulty).
This activity is called “Count Out Exact Change Without a Calculator.”

Here is the job setting.
I am a food and beverage server, and you are my trainee. You are selling food at a booth at the park during Summer Festival Days. You have a cash box, but you don’t have a calculator.

Show the cash box.

Here is the menu for the food you are selling.

Show ILLUSTRATION X with menu. Take time to discuss.

Often a customer will overpay you for the food he buys. That means he will give you more cash than he owes. When this happens, you must count out change for him from your cash box. You will count his change out loud, counting from the price he owes to the total amount he paid.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item he should write or draw something to aid memory if needed.

Now back to the job setting! We'll work through some customer payments together:
The first customer wants the Caesar salad. How much does he owe? (RESPONSE)

Help the student locate the item price if needed.

Here is his payment.

Put a ten-dollar bill on the table as the payment.

How much has he paid? (RESPONSE)
That is an overpayment for the food, so you must count out change for him. Do you think you can do this alone? (RESPONSE)

If the student wants to count out change aloud independently, let him do so.
If he makes an error, or doesn't know how to do the task, count out change aloud for him starting with the smallest coins and proceeding to the total amount.
For example, if he pays with a ten-dollar bill for Caesar salad ( $5.89), you would say, “Five eighty-nine, five ninety,” (putting down penny), “six dollars,” (putting down dime), and “two is eight” (putting down toonie), and “two is ten dollars” (putting down toonie). “Thank you. Enjoy your day!”

Here comes the second customer. He wants the 14-inch pizza and here is his payment. Count it up and count out change if needed.

Put a twenty-dollar bill down as payment.
Proceed as above.

Now here's another customer. He wants a large chocolate shake. Here is his cash.

Put a twenty-dollar bill down as payment.
Proceed as above.

That's the end of this job activity!
Now give me a few minutes to make my notes and then we'll see what's next.
**New Numeracy Skill: Count Out Exact Change Without a Calculator**

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Count out loud from price owed to amount given using fewest possible items of cash.**

Tutor writes digit numbers for amount paid and amount given.


Student counts forward aloud from total owed to amount paid starting with cents:

“Thirteen twenty, thirteen twenty-five, fifty, seventy-five, fourteen dollars, fifteen and five is twenty dollars.” while giving, a nickel, three quarters, a loonie and a five-dollar bill.

**Possible Situations:**

1. Dollar total equals dollars given.
   E.g., Total $4.36. Given $4.50.
   Use pennies to count from cent total to next multiple of 5.
   Use dimes and nickels to count forward to amount given.

2. Dollar total less than dollars given, but no cents owed.
   E.g., Total $4.00. Given $20.
   Use toonies and loonies to go from dollar total to next multiple of 5.
   Use ten- and five-dollar bills to count forward to amount given.

3. Dollar total less than dollars given, but cents owed also.
   E.g., Total $4.07. Given $10.
   Use pennies, dimes, and nickels to count to next multiple of 25.
   Use quarters to count to next dollar.
   Use toonies and loonies to go from next dollar to next multiple of 5.
   Use ten- and five-dollar bills to count forward to amount given.

**Learning Activities:**

**Website Interactive**

**Skill: Count out exact change less than $1 without a calculator.**

**Website 6G**

Enter address: [http://funbrain.com/](http://funbrain.com/)

Click on “All Games.”

Click on “Change Maker.”

Click on “Easy” (less than $1), “Medium” (less than $5) or “Hard” (less than $100).

Click on Canadian flag.

Click on coins one at a time to count from amount of sale to amount paid.

Click on “Go” to enter answer.

See above for feedback.

See money accumulate in piggy bank for correct answers.

**Website Interactive**

**Skill: Count out exact change higher amounts without a calculator.**

Use **Website 6G** as above, but click on “SuperBrain.”
Numeracy Tier: Money

Skill 44: Subtract Money on a Calculator

Job Setting
Taxi driver: calculating change on a calculator

Task Set
- Count up money paid.
- Enter money paid on calculator.
- Read money owed from meter.
- Subtract money owed from money paid on calculator.
- Read difference from calculator display.
- Count out change.

Documents
- Sign (Taxi Meter: change due)
- Cash

Tools
- Calculator
- Taxi meter

Tutor Preparation
- Photocopy ILLUSTRATION Y: Sign (Taxi Meter: change due).
- Prepare list of underlined vocabulary from script page.

Checklist
- Money paid counted correctly?
- Money paid entered correctly?
- Amount read from meter correctly?
- Money subtracted correctly?
- Difference read correctly from display?
- Change counted out correctly?

Tips
- None

To Retest
- Photocopy ILLUSTRATION Z: Sign (Taxi Meter: change due; retest) to reuse original job setting. Enter a different amount on the taxi meter.

☐ You have shown that you can subtract money on a calculator. You may highlight Skill 44 on the MONEY TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with subtracting money on a calculator would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
In the last activity, you showed that you could make change without a calculator. Now you will find change by using a calculator. On the calculator you will subtract the cost from the amount paid. This is similar to finding change on a cash register. The title for the activity is “Subtract Money on a Calculator.”

Here is the job setting.
I am a taxi driver, and you are my trainee. You have a cash box for those customers who choose to pay with cash. You also have a calculator with you. A customer has paid you for the ride with large bills. You will use the calculator to figure out his change and then give it to him.

Here is the meter on your cab showing the amount that your customer owes for his ride.

**Show ILLUSTRATION Y with taxi meter showing amount owing.**

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

**Help the student highlight each of the underlined vocabulary items above.**

Beside each item, he should write or draw something to aid memory if needed.

Now back to the job setting!
Here is the customer's payment. How much has he given you? (RESPONSE)

**Put two twenty-dollar bills on the table.**

That's more than the meter shows, so now use the calculator to figure out the difference between what he gave you and what he owes. That will be his change.

**If the student is able to proceed alone, let him finish the calculation. Affirm a correct calculation.**

**If the calculation is wrong, or if the student doesn't know how to respond, show him how to subtract the cost from the cash value on the calculator.**

How much change should you give the customer? (RESPONSE)

**Correct as needed.**

Select the change from the cash box and put it on the table. (RESPONSE)

**Correct as needed.**

That's the end of this job activity!
Now give me a moment to make my notes and then we'll see what's next.
Subskills and Resources: Skill 44

New Numeracy Skill: Subtract Money on a Calculator

Learning/Practice Activities:
Tutor/Student

Skill: Find the difference between money owed and overpayment (amounts given orally).
Tutor dictates amount given and overpayment amount.
Student enters money subtraction sentence on computer.
Student reads total from calculator display out loud.

Learning/Practice Activities:
Website Interactive

Skill: See money subtraction number sentence, subtract on calculator

Website 1Ai
Enter address: http://www.aaaknow.com
Click on “Money.”
Click on “Subtract Money.”
Scroll down to page 2.
Click on “Start.”
Type digit number to answer question.
See box below for feedback.

Enrichment Activities:
Website Interactive

Skill: See money subtraction number sentence, subtract on calculator.
Use Website 1Ai as above, but scroll down to page 3 to set 60-second time limit before clicking “Start.”
Numeracy Tier: Money

Skill 45: Estimate Change

Job Setting
Nanny: preparing to pay for fast food

Task Set
- Read cost of individual food items from menu.
- Estimate total cost by rounding and adding.
- Mentally find the difference between the rounded cost and overpayment.
- Tell estimated change.

Documents
- Sign (Menu)

Tools
- None

Tutor Preparation
- Photocopy ILLUSTRATION X: Sign (Menu Board).
- Prepare to talk about what it is a good idea to predict change owed to you.
- Prepare list of underlined vocabulary from script page.

Checklist
- Estimated total reported correctly? ☐
- Estimated change told correctly? ☐

Tips
- None

To Retest
- Reuse original job setting, but vary items chosen from menu and payment.

☐ You have shown that you can estimate change. You may highlight Skill 45 on your Skill Ladder. This completes the MONEY TIER. Your skill set is growing! Now go to the enrichment activities, if available.

☐ More practice with estimating change would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Estimate Change.” This is one more skill of a smart shopper. When you overpay, you should always estimate how much change you will be getting back. Why would this be a smart thing to do? (DIALOGUE)

Here is the job setting.
I am a nanny, and you are my trainee. You are buying food for our child at the park during Summer Festival Days. You will be overpaying with a twenty-dollar bill. You must guess how much change you will get back. This is easy to do if you estimate the total cost, and count forward to twenty dollars.

Now back to the job setting!
Here is the food menu.

Show ILLUSTRATION X with menu.

You plan to order a slice of pizza and a small pop.
Estimate the total cost of those two items by rounding each item off and adding them together. (RESPONSE)

Prompt as needed.

Okay. Now count forward from that total to twenty-dollars to find the approximate amount of change you should get. You can use your fingers if it will help you think. (RESPONSE)

If the student can do this alone, let him finish. Affirm the correct answer.

If he makes an error, or is unable to figure it out, show him how to count forward from the rounded cost to twenty using his fingers. Then count the fingers to find the approximate amount of change owed.

That's the end of this job activity!
Now give me a few minutes to make my notes, and then we'll see what's next.
New Numeracy Skill: Estimate Change

Learning/Practice Activities:
Tutor/Student

Skill: Estimate change by counting forward from rounded-off amount owed to amount given
Tutor dictates amount owed exactly and amount given (difference no more than $10).
Student rounds off amount owed to nearest dollar.
Student counts forward from rounded amount to amount given using fingers.
Student counts fingers to see amount of change expected.
Student says change as dollar amount more or less than approximate amount.

Note: If amount owed was rounded down, change will be more than approximate amount.
E.g., $5.09 (rounded $5) from $10 will be less than $5.

If amount owed was rounded up, change will be more than approximate amount.
E.g., $5.69 (rounded $6) from $10 will be more than $4.

Learning/Practice Activities:
Website Interactive

Skill: See money subtraction number sentence, estimate change, subtract on calculator to confirm.

Website 1Aj
Enter address: http://www.aaaknow.com
Click on “Money.”
Click on “Change from a Purchase.”
Scroll down to page 2.
Click on “Start.”
Type dollar sign.
Type digit number in answer box to show difference.
Click on “Check.”
See box below for feedback.

Enrichment Activities:
Website Interactive

Skill: See money subtraction number sentence; subtract on calculator.
Use Website 1Aj as above, but scroll down to page 3 to set 60-second time limit before clicking on “Start.”
Numeracy Tier: Time

Skill 46: Read and Write Amounts of Time

Job Setting
Kitchen helper: reading and writing recipe times

Task Set
- Read cooking time in abbreviation from recipe.
- Write time in abbreviation in note.

Documents
- Instructions (Recipe)
- Note (to co-worker)

Tools
- Pencil with eraser

Tutor Preparation
- Photocopy ILLUSTRATION V: Instructions (Recipe).
- Photocopy ILLUSTRATION W (Note: to Frank).
- Prepare list of underlined vocabulary from script page.

Checklist

Time read aloud correctly from recipe?
   Time found?    □
   Numbers read correctly? □
   Units read correctly? □

Time written correctly in note?
   Correct numbers? □
   Correct abbreviations? □

Tips
- None

To Retest
- Reuse original job setting. Choose a real recipe. Prepare new note to Frank to match.

☐ You have shown that you can read and write amounts of time. You may highlight Skill 31 in your TIME TIER. This is both a reading and a writing skill, so highlight half yellow and half orange. Now go to the enrichment activities, if available.

☐ More practice with reading and writing amounts of time would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
You have highlighted all the steps in the MONEY TIER of your skill ladder. Congratulations! In this activity you will start the TIME TIER.

The title of this activity is “Read and Write Amounts of Time.” Often we have to talk about how much time has passed or will pass. Sometimes we use words such as years, months, weeks, or days. Sometimes we talk about hours or minutes. Sometimes we talk about seconds, which are very short amounts of time indeed.

In this activity, you use the words “hours” and “minutes” to tell and write amounts of time. You will use short forms, or abbreviations, for these time words.

Here is the job setting.
I work in the kitchen of a bakeshop, and you are my trainee. Frank, the baker, has been called away suddenly, and left some loaves of fruit bread ready to go into the oven. It's up to us to bake them. You will check the recipe to find out the recommended baking time. If they don't bake for the right amount of time, we'll be in trouble!

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now let's get back to the job setting!
Here is the recipe:
Show ILLUSTRATION AA with the recipe.
We need to know the recommended cooking time. Can you find that information in the recipe?
(RESPONSE)
Affirm a right answer.
Correct wrong reading.
If the student can't find the time, tell him to look for numerals. Discuss with him which numerals are followed by time units and which signify other amounts (measurements, etc.).

Okay. That's fine. Now, we should probably bake up the oatmeal cookies too as I see Frank has left the cookie dough in the refrigerator. I don't think we have a recipe for those, but I think the recommended cooking time is eight to ten minutes. Let's go ahead and bake them for that amount of time. We can leave Frank a note telling him what we've done. I've already got most of the note written. Here it is.

Show ILLUSTRATION AB with the note to Frank.
Read together.

On the note, you can fill in the amount of recommended cooking time for the cookies. Remember to use the abbreviations. (RESPONSE)

If the student has trouble, suggest he copy the time directly from the recipe.

Fine! Now before we leave this activity, you should put some vocabulary words into your personal dictionary.

Show the vocabulary list of underlined words that you have prepared.
Help the student put words into his personal dictionary. (See Skill 17.)

Okay! That's the end of this job activity!
Now give me a minute to make my notes, and then we’ll see what’s next.
Subskills and Resources: Skill 46

New Numeracy Skill: Read and Write Amounts of Time in Abbreviations
(Hours and Minutes)

Learning/Practice Activities:
Tutor/Student

Skill: Read amount of time in hours and minutes (abbreviated).
Tutor writes time amounts in hours and minutes.
E.g., 2hr. 10 min.
Student reads orally.

Skill: Copy amount of time in hours and minutes (abbreviated).
Tutor writes time amounts in hours and minutes.
E.g., 2hr. 10 min.
Student copies.

Skill: Write amount of time in hours and minutes (abbreviated) from time heard.
Tutor dictates time amounts in hours and minutes.
E.g., “two hours and ten minutes”
Student writes time amount in abbreviations.
Numeracy Tier: Time

Skill 47: Read and Write Digital Time

Job Setting
Sewing machine operator: signing in and out on timesheet

Task Set
- Write digital time from heard time.
- Read time aloud from digital clock.
- Copy time from digital clock.

Documents
- Form (Timesheet)

Tools
- Disabled digital clock
- Digital watch in operation
- Analog clock or watch in operation

Tutor Preparation
- Prepare to discuss where time is measured digitally.
- Photocopy ILLUSTRATION AC: Form (Timesheet).
- Print three first names in the employee column for each day of the week (gray shaded boxes). Two of the names should be your own and your student's names. Make up the third.
- Set clock to read 3:55 in the afternoon, but do not have it visible at beginning of activity.
- Prepare list of underlined vocabulary from script page.

Checklist
Digital time written correctly written correctly in words
Correct numbers? □ ______________________
Two digits for minutes? □ _______ ______________________
a.m. and p.m. used? □ ______________________
Time read correctly aloud? □ ______________________

Tips
- None

To Retest
- Reuse original job setting. Vary times and clock settings

☐ You have shown that you can read and write digital time. You may highlight Skill 47 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.
☐ More practice with reading and writing digital time would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Read and Write Digital Time.” Reading time is also called “telling time.” Both mean looking at a clock to see what time of day it is. There are two kinds of clock: the analog clock and the digital clock. The analog clock is the one you usually see on a wall. It has a round face and two hands.

**Show analog clock.**

A digital clock just shows numbers. Here is an example of a digital watch.

**Show digital watch. Discuss where student has seen time measured digitally.**

In this activity you will be reading and writing times as they are shown on a digital clock.

Here is the job setting.

I am a sewing machine operator, and you are my trainee. When we come to work, we write the time on our timesheet. We do the same thing when we leave. Here is the timesheet.

**Show ILLUSTRATION AC with timesheet.**

**Discuss format of sheet.**

Have you ever had to sign in and out on a timesheet? (RESPONSE)

There are different shifts at work, so it is important that we write a.m. or p.m. with our times. We write a.m. for times between midnight and noon and p.m. for the other times.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

**Help the student highlight each of the underlined vocabulary items above.**

**Beside each item, he should write or draw something to aid memory if needed.**

Now let's get back to the job setting!

It's Monday morning. We are the first people in the door, so we will be the first to sign in. It’s seven oh five, so go ahead and sign in if you are able. Write the time and your initials.

**If the student is able to sign in alone, let him finish. Affirm if correct.**

**If he makes an error or doesn't know how to sign in, sign in for yourself and have him copy.**

Okay. Now let's pretend that it's the end of the working day and time to sign out. Look at the clock and tell me what time it is. (RESPONSE)

**Show disabled clock set to 3:55.**

**If the student says the time correctly, affirm it. If he makes a mistake or doesn't know what to say, read it for him.**

Fine. You can sign out now.

**Respond as above.**

That's the end of this activity!
Now give me a few minutes to make my notes, and then we'll see what's next.
New Numeracy Skill: Read and Write Digital Time

Learning/Practice Activities:
Tutor/Student

**Skill: Write digital time in hours and minutes.**
Tutor says digital time without a.m. or p.m.
E.g., “It's four oh five.”
Student writes the hour as digit.
Student writes colon.
Student writes the minutes as two digits.

**Skill: Write a.m. or p.m.**
Tutor says digital time plus “in the morning” or “in the afternoon/evening; at night.”
E.g., “It's four oh five in the morning,” or “It's four oh five in the afternoon.”
Student writes the hour as digit.
Student writes colon.
Student writes the minutes as two digits.
Student writes a.m. or p.m. as suitable.
Numeracy Tier: Time

Skill 48: Read an Analog Clock as Digital Time

Job Setting
Taxi driver: telling customer the time

Task Set
- Read analog watch:
  Find hour hand.
  Read the hour number (digit that hour hand is pointing to or has just passed).
  Find minute hand.
  Read minute hand by skip-counting by five and counting on by ones.

Documents
- None

Tools
- Analog wristwatch in operation

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
- Time read correctly? [ ]

Tips
- None

To Retest
- Reuse original job setting. Set analog watch differently.

☐ You have shown that you can read an analog clock as digital time. You may highlight Skill 48 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with reading an analog clock as digital time would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Read an Analog Clock as Digital Time.”

Here is the job setting.
I am a taxi driver, and you are my trainee. You have picked up a customer at the airport. He has just arrived from overseas and wants to reset his watch to the right time for our time zone. He is asking you for the time. You will read your analog watch to tell him the digital time.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now let's get back to the job setting!
Here is your analog watch.
Show analog watch.

What time is it? (RESPONSE)
Affirm a correct answer.

If the student answers correctly, but in words rather than digital terms (e.g., “five to four”), affirm his skill, but ask for a digital reading as well.

If the student doesn't know how to read the time, walk him through these steps:
Find hour hand.
Read the hour (number that hour hand is pointing to or has just passed).
Find minute hand.
Skip-count by fives and count on by ones from 12 to read the minutes.

That's the end of the job activity!
Now give me a few minutes to make my notes, and then we'll see what's next.
New Numeracy Skill: Read an Analog Clock as Digital Time

Learning/Practice Activities:
Tutor/Student

Skill: Read hour hand.
Tutor shows time on disabled analog clock.
Student finds hour hand.
Student says number that hour hand is touching or has just passed.

Skill: Read minute hand.
Tutor shows time on disabled analog clock.
Student finds minute hand.
Student writes time digitally (digit numbers and a.m. or p.m.).

Learning/Practice Activities:
Website Interactive

Skill: Type analog clock time digitally.
Website 10B
Enter address: http://www.shodor.org/
Click on “Curriculum Materials.”
Click on “Project Interactivate.”
Click on “Activities.”
Click on “Interactive Learning.”
Click on “Geometry and Measurement Concepts” and “all skill levels.”
Click on “Clock Wise.”
Click on “Random.”
Click on “Easy,” “Medium,” or “Hard” for level.
Type digit number in hour box to match analog clock.
Type digit number in minute box to match analog clock.
Click on “Try Your Guess.”
See below for feedback.

Skill: Type analog clock time digitally.
Website 2G
Enter address: http://aplusmath.com
Click on “Flashcards.”
Click on “Analog Clock” under “Java Flashcards.”
Pull down menu to see difficulty (Easy = 15 min. intervals; Medium = 5 min.
intervals; Hard = 1 min. intervals).
Click on difficulty level chosen.
Pull down menu to see number of problems.
Click on number of problems chosen.
Click on “off” to do activity untimed.
Type digit numbers to enter digital time that matches analog.
Click on “Enter.”
See box to side for feedback; see “Message” for correction.
Skill: Make blank analog clock for telling time.

Website
Enter address: http://www.handwritingforkids.com/
Click on “Enter.”
Click on “Manuscript.”
Click on “Time/Clock – What Time is It?”
Print worksheet.

Enrichment Activities:
Website Interactive

Skill: Write months in words in cursive.

Website
Enter address: http://www.handwritingforkids.com/
Click on “Enter.”
Click on “Cursive.”
Click on “Words: Category: Month of the Year.”
Click on individual month.
Print worksheet to fill in.

Enrichment Activities:
Website Interactive

Skill: Read analog clock and enter hours and minutes as for digital time (time limit)

Website 12B
Enter address: http://thatquiz.com/
Click on “Time.”
Pull down menu to set level.
Click on “4” to set level.
Pull down timer menu.
Click on “1:00” to set time limit.
Type digit number in hour box to match analog clock.
Type digit number in minute box to match analog clock.
Click on “OK.”
Check score at top right when time is up.

Skill: Type analog time digitally (time limit).
Use Website 2G as above but set timer.
Numeracy Tier: Time

Skill 49: Set an Analog Clock

Job Setting
Cleaner: resetting wall clocks after power failure

Task Set
- Move hands on analog clock to match times heard.
  Distinguish hour number heard from minute number.
  Move hour hand to point exactly to hour heard.
  If minutes are heard as a number only, or if “past” is heard, move minute hand clockwise by fives and ones.
  If “to” or “before” is heard, move minute hand counter clockwise by fives and ones.
  If “half past” is heard, move minute hand clockwise to 6.
  If “quarter past” is heard, move minute hand clockwise to 3.
  If “quarter to” is heard, move minute hand counter clockwise to 9.

Documents
- None

Tools
- Analog clock

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
Clocks set correctly independently? □ __________________________

Tips
- None

To Retest
- Reuse job setting. Dictate different times in various formats.

☐ You have shown that you can set an analog clock. You may highlight Skill 49 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with setting an analog clock would be helpful. Let’s look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Set an Analog Clock.”

Setting an analog clock usually means turning a knob so that the clock hands move clockwise or counter clockwise. The setting knob is usually on the back for a clock and on the top for a watch. Do you have experience setting analog clocks? (RESPONSE)

In this activity, you will set an analog clock to times that you hear.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now let's get to the job setting!
I am a cleaner, and you are my trainee. We work in a school. Sometimes it will be our job to reset the clocks in the classrooms. For example, there may be a power failure and all the clocks will stop, or it may be time to switch all the clocks to daylight savings time. I want to be sure that you can do this yourself if needed, so you are going to practise beforehand.

Here is the analog clock that you will use for practice. Can you show me how to move the hands on it? (RESPONSE)

Help if needed.

Okay. Set the clock to half past six.

Affirm a correct setting.
If the student does not know how or makes a mistake, proceed as follows:
We will set the clock to six o'clock first, and then move the hands clockwise until the minute hand is halfway around the clock. (DEMONSTRATE)
Continue as above for the following time challenges:

<table>
<thead>
<tr>
<th>Time Challenge</th>
<th>Clock Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 past 3</td>
<td></td>
</tr>
<tr>
<td>4 ten</td>
<td></td>
</tr>
<tr>
<td>1 quarter past 7</td>
<td></td>
</tr>
</tbody>
</table>

Now set the clock to ten to eleven.

Affirm a correct setting.
If the student does not know how or makes a mistake, proceed as follows:
We will set the clock to eleven o'clock first, and then move the hands counter clockwise until the minute hand is five minutes to eleven. (DEMONSTRATE)
Continue as above for the following time challenges:

<table>
<thead>
<tr>
<th>Time Challenge</th>
<th>Clock Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 quarter to 8</td>
<td></td>
</tr>
<tr>
<td>20 five minutes to 6</td>
<td></td>
</tr>
</tbody>
</table>

That's the end of this job activity.
Now give me a few minutes to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 49

New Numeracy Skill: Set an Analog Clock

Learning/Practice Activities:
Tutor/Student

SET TIME WITH WORD “PAST” OR “AFTER”

Skill: Set half past hour.
Tutor says time such as “half past four.”
Student sets time to four o'clock.
Student moves hands clockwise until minute hand is half-way around clock (pointing to 6).

Skill: Set quarter past/after hour.
Tutor says time such as “quarter after five.”
Student sets time to five o'clock.
Student moves hands clockwise until minute hand is one-quarter around clock (pointing to 3).

Skill: Set __”minutes” past/after hour.
Tutor says time such as “ten past two.”
Student sets time to two o'clock.
Student moves hands clockwise one digit number at a time counting by fives until minute count is reached.

SET TIME WITH WORD “TO” OR “BEFORE”

Skill: Set quarter to hour.
Tutor says time such as “quarter to five.”
Student sets time to five o'clock.
Student moves hands counter clockwise until minute hand is one-quarter around clock (pointing to 9).

Skill: Set __”minutes” to /before hour.
Tutor says time such as “ten to two.”
Student sets time to two o'clock.
Student moves hands counter clockwise one digit number at a time counting by fives until minute count is reached.

Learning/Practice Activities:
Website Interactive

Skill: Match digital and standard times both seen and heard.
Website 3A
Enter address: [http://www.dfes.gov.uk/](http://www.dfes.gov.uk/)
Type words “embedded learning portal” in Search box.
Click on “Search.”
Click on “Embedded Learning Portal, Department of Education and Skills.”
Click on “Interactive Learning.”
Click on “Search” (should be set to “all subjects” and “all skill levels”).
Scroll down to bottom of page.
Click on “4” in bottom line (page 4).
Click on “Reading Times: Launch e-learning.”
Follow audio instructions.
Skill: Match digital and standard times both seen and heard.

Website 3B
Enter address: http://www.dfes.gov.uk/
Type words “embedded learning portal” in Search box.
Click on “Search.”
Click on “Embedded Learning Portal, Department of Education and Skills.”
Click on “Interactive Learning.”
Click on “Search” (should be set to “all subjects” and “all skill levels”).
Scroll down to bottom of page.
Click on “4” in bottom line (page 4).
Click on “Recording Time of Day: Launch e-learning.”
Follow audio instructions.

Skill: Match digital and standard times both seen and heard.

Website 3C
Enter address: http://www.dfes.gov.uk/
Type words “embedded learning portal” in Search box.
Click on “Search.”
Click on “Embedded Learning Portal, Department of Education and Skills.”
Click on “Interactive Learning.”
Click on “Search” (should be set to “all subjects” and “all skill levels”).
Scroll down to bottom of page.
Click on “4” in bottom line (page 4).
Click on “Understand Times: Launch e-learning.”
Follow audio instructions.
Click and stick as directed.

Skill: Make blank analog clock for telling time.

Website
Enter address: http://www.handwritingforkids.com/
Click on “Enter.”
Click on “Manuscript.”
Click on “Time/Clock – What Time is It?”
Print worksheet.
Enrichment Activities:
Website Interactive

Skill: Read a.m. and p.m. (digital and standard) both seen and heard.
Website 3C
Enter address: [http://www.dfes.gov.uk/](http://www.dfes.gov.uk/)
Type words “embedded learning portal” in Search box.
Click on “Search.”
Click on “Embedded Learning Portal, Department of Education and Skills.”
Click on “Interactive Learning.”
Click on “Search” (should be set to “all subjects” and “all skill levels”).
Scroll down to bottom of page.
Click on “4” in bottom line (page 4).
Click on “Recording am and pm times: launch e-learning.”
Follow audio instructions.
Click and stick where required.

Skill: Match a.m. and p.m. digital and standard times.
Website 5A
Enter address: [http://www.english-zone.com/](http://www.english-zone.com/)
Click on “Time” under “Basic Skills Zone.”
Click on “What Time Is It?”
Pull down menu to see standard time matches to digital times.
Click on answer matches.
Click on “Check” when all matches made.
Look in boxes for feedback.
Numeracy Tier: Time

Skill 50: Set a Timer

Job Setting
Visiting homemaker: setting kitchen timer to time client’s medical treatment

Task Set
- Set timer.
  Read digit numbers on timer.
  Skip-count and count on.
- Turn timer off.
- Estimate time to complete task (number of digit numbers that can be written in time given).
- Set timer again.
- Write digit numbers beginning at 0.
- Compare estimate to actual number.

Documents
- None

Tools
- Kitchen timer
- Paper
- Pencil with eraser

Tutor Preparation
- Prepare to talk about when you use a kitchen timer.
- Prepare list of underlined vocabulary from script page.

Checklist

<table>
<thead>
<tr>
<th>Task</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer set correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate made?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numbers written correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison correct?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tips
- None

To Retest
- Reuse original job setting, but use time setting.

☐ You have shown that you can set a timer. You may highlight Skill 50 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with setting a timer would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Set a Timer.” You will be using this kitchen timer.

**Show kitchen timer.**

Have you used a kitchen timer before? (DIALOGUE)

There are many different kinds of timers. They are used in the home and on the job to time cooking and other short activities. They usually have a bell or a buzzer that will make a noise when the **time is up** for the activity. Many timers are like analog clocks. They have **marks** to show minutes. This buzzer has 60 minute marks to show one hour.

**Show minute marks.**

Here is the job setting for this activity.

I am a visiting homemaker, and you are my trainee. Your client, Stanley, has to take light treatments on his skin for some minutes each day. You will set the timer to time his treatment. When you set the timer, you will turn the treatment light on. When the timer stops **ticking** and the bell **goes off**, you must turn the light off.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

**Help the student highlight each of the underlined vocabulary items above.**

Beside each item, he should write or draw something to aid memory if needed.

Now let's get back to the job setting!

Today Stanley must have the treatment light on for twelve minutes exactly. Can you set the timer for twelve minutes? (RESPONSE)

If the student can do this alone, let him do so. Affirm success.

If he makes an error, or doesn't know what to do, set the timer for him.

Okay. Let's turn the timer off for now. Can you do that? (RESPONSE)

Help if needed.

Now just for fun, let's see if you can do some estimating. Stanley's light treatment is for 12 minutes. How many digit numbers do you think you can write in 12 minutes? (RESPONSE)

Okay, let's give it a try. Set the timer for 12 minutes. (RESPONSE)

Here are paper and pencil with eraser. You can start writing! (RESPONSE)

If the student is unsure how to start, do a few for him as an example.

Have the student continue until the timer goes off.

Let's see how many digit numbers you wrote. Let's look at your estimate.

Remind student of his guess.

Did you guess exactly right, overestimate, or underestimate? (RESPONSE)

That's the end of this job activity!

Now give me a few minutes to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 50

New Numeracy Skill: Set a Timer

Learning/Practice Activities:
Tutor/Student

Skill: Set a kitchen timer.
    Tutor tells time to be set on kitchen timer.
    Student turns dial clockwise to exact digit number or closest lower digit number.
    Student counts on clockwise by ones following minute markings to target time.

Enrichment Activities:
Tutor/Student

Skill: Set different kinds of timers.
    Tutor and student bring in variety of timers to set.
Numeracy Tier: Time

Skill 51: Read a Timer

Job Setting
Esthetician: reading time remaining in client's perm

Task Set
- Read timer.
  Count forward by ones to mark currently indicated on timer face.
  Say time as minutes left.

Documents
- None

Tools
- Kitchen timer

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
- Timer read correctly?
- Correct number?  □
- Minutes used as units?  □

Tips
- None

To Retest
- Reuse original job setting. Set timer differently.

☐ You have shown that you can read a timer. You may highlight Skill 51 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with reading a timer would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Read a Timer.” This time you will read a kitchen timer to see how much time is left for an activity.

Here is the job setting.
I am a hairdresser, and you are my trainee. Our client, Jean, is getting a perm. We have set a timer to time how long to leave the perm solution on her hair. You will be checking the timer to let me know how much time is still left in Jean's treatment.

Before continuing, let's take a moment to highlight the new vocabulary in your glossary.

**Help the student highlight each of the underlined vocabulary items above.**

Beside each item, he should write or draw something to aid memory if needed.

Now back to the job setting!

**Set timer.**

Here is the timer. How much time is left for Jean's perm? (RESPONSE)

**Affirm a right answer.**

If the answer is incorrect, or the student doesn't know how to proceed, show how to find the nearest digit number preceding the indicator dial and count on by ones.

That's the end of this job activity!
Now give me a few minutes to make my notes, and then we'll see what's next.

---

**Subskills and Resources: Skill 51**

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**New Numeracy Skill: Read a Timer**

**Learning/Practice Activities:**

**Tutor/Student**

**Skill: Read a kitchen timer.**

Tutor sets kitchen timer.
Student reads last digit number before dial indicator.
Student counts on by ones using markings to indicator to see time left.

**Enrichment Activities:**

**Tutor/Student**

**Skill: Read different kinds of timers.**

Tutor and student bring in variety of timers to read.
Numeracy Tier: Time

Skill 52: Calculate Elapsed Time

Job Setting
Food and beverage server: calculating customer time spent in line

Task Set
- Hear and remember time of arrival.
- Read time on analog clock.
- Calculate elapsed time (less than one hour).
- Hear and remember two times.
- Calculate elapsed time (more than one hour).

Documents
- None

Tools
- Disabled analog clock

Tutor Preparation
- Set disabled analog clock to 8:10.
- Prepare list of underlined vocabulary from script page.

Checklist
- Time read correctly from analog? □ ___________
- Elapsed time correct? □ ___________

Tips
- The student has to remember times and imagine times on the analog clock simultaneously. This is difficult and may take practice.
- Use “host” or “hostess” in the script depending on whether your student is male or female.

To Retest
- Reuse original job setting, but vary times.

☐ You have shown that you can calculate elapsed time. You may highlight Skill 52 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities if available.

☐ More practice with calculating elapsed time would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Calculate Elapsed Time.”
Sometimes you need to know out how much time has passed since something started. Perhaps you need to know how long the baby has been sleeping. Or maybe you need to know how long something has been in the oven.

Here is the job setting.
I am a host/hostess at a restaurant, and you are my trainee. We have an angry customer. He feels he has been waiting in line for a table for too long. You are going to talk to him to figure out how much time has passed while he was waiting in line.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.
Help the student to highlight each of the underlined vocabulary items above.
Beside each item he should write or draw something to aid memory if needed.

Now let's get back to the job setting.
Our angry customer says he's been waiting here since 7:35 this evening.
Look at the clock and tell what time it is now. (RESPONSE)
Show analog clock set to 8:10.

So how long has the customer been waiting altogether? (RESPONSE)
Affirm a right answer.

If the student makes an error or doesn't know how to calculate, show him how to count forward while looking at the analog clock. He should start at the minute when the customer arrived and count forward in five-minute and one-minute intervals to the present time.

That is a long time. What do you think we should say to the customer now? (DIALOGUE)

That's a bad story, but here's a story that is even worse! Once someone had to wait a really long time. He arrived at 7:05 and he didn't get a chance to sit down until 8:15. How long was his wait? (RESPONSE)
Affirm a right answer.

If the student makes an error or doesn't know how to calculate, show him how to count forward one hour from 7:05 to 8:05 and then count on by fives for the remaining minutes.

That's the end of this job activity. Now give me a moment to make my notes, and then we'll see what's next.
New Numeracy Skill: Calculate Elapsed Time

Learning/Practice Activities:
Tutor/Student

Skill: Determine if time difference is less than one hour.
Tutor asks how much time has elapsed before earlier and later times.
Include times that are both more and less than one hour.
E.g., 2:45 and 3:10; 2:45 and 3:55; etc.
Student mentally adds one hour to earlier time and compares total with actual later time.

Skill: Calculate elapsed time when time is less than one hour.
Tutor says two times with difference less than one hour (e.g., 3:15 and 3:50 or 3:50 and 4:10).
Student determines that time difference is less than one hour.
Student looks at analog clock or watch to imagine position of minute hand in earlier time.
Student counts forward from imagined position in increments of five and one to position of minute hand in later time.
Student says elapsed time as minutes counted.

Skill: Calculate elapsed time when time is more than one hour.
Tutor says two times with difference more than one hour (e.g., 3:15 and 4:35).
Student determines that time difference is more than one hour.
Student looks at analog clock or watch to imagine position of minute hand in earlier time.
Student counts forward from imagined position in increments of five and one to position of minute hand in later time.
Student says elapsed time as hour(s) passed and minutes counted.
Numeracy Tier: Time

Skill 53: Calculate What Time to Stop

Job Setting
Esthetician: calculating time to remove hair solution

Task Set
- See analog time.
- Add on hour(s) to get new hour time.
- Skip-count by fives and ones from current minute hand to add on minutes.
- Say new time as hour(s) and minutes.

Documents
- None

Tools
- Disabled analog clock set to minutes ending in 5 or 0 (e.g., 3:05; 3:10)

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
- Time read correctly from clock?
- New time hour told correctly?
- New time minutes told correctly?

Tips
- None

To Retest
- Reuse original job setting, but vary times told.

☐ You have shown that you can calculate what time to stop. You may highlight Skill 53 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with calculating what time to stop would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Calculate What Time to Stop.” This is an important skill for planning your workday.

Here is the job setting.
I am a hairdresser, and you are my trainee. Our client is Barbara. You are putting a solution on her hair. The solution must stay on her hair for one hour and 15 minutes. Longer than that will be a problem. You must decide exactly what time to stop the solution from working by washing it out of Barbara's hair. You will look at an analog clock to note the present time and to think about what time to remove the solution.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above. Beside each item, he should write or draw something to aid memory if needed.

Now let's get back to the job setting!
Start by telling the present time from the clock (RESPONSE).

Show the preset analog clock.

Now say what time it will be if you add one hour and fifteen minutes to the present time. (RESPONSE)

If the student answers independently, affirm a correct answer.

If he makes a mistake or doesn't know how to proceed, show him how to get the answer by following this sequence:

- Look at the analog clock as you count forward by fives to fifteen from the present minutes to get the new minutes.
- Increase the hour by one if the minute hand did not pass 12.
- Increase the hour by two if the minute hand did pass 12.
- Say the time in new hours and new minutes.

That's the end of this job activity!
Now give me a few moments to make my notes, and then we'll see what's next.
Subskills and Resources: Skill 53

New Numeracy Skill: Calculate What Time to Stop

Learning/Practice Activities:
Tutor/Student

Skill: Calculate what time to stop (time to be added less than one hour).
Tutor says initial clock time (e.g., 2:25).
Tutor says time to be added (e.g., forty minutes).
Student looks at analog clock and imagines initial time.
Student counts forward from minute hand in increments of five and one to total of time added.
Student “reads” new time from clock.

Skill: Calculate what time to stop (time to be added in hours and minutes).
Tutor says initial clock time (e.g., 2:25).
Tutor says time to be added (e.g., one hour and forty minutes)
Student mentally adds one hour
Student looks at analog clock and imagines initial time plus one hour.
Student counts forward from minute hand in increments of five and one to total of time added.
Student “reads” new time from clock including new hour and minutes.

Challenge/Enrichment Activities:
Website Interactive

Skill: Add on time (variety of methods).
Website 3D
Enter address: http://www.dfes.gov.uk/
Type words “embedded learning portal” in Search box.
Click on “Search.”
Click on “Embedded Learning Portal, Department of Education and Skills.”
Click on “Interactive Learning.”
Click on “Search” (should be set to “all subjects” and “all skill levels”).
Scroll down to bottom of page.
Click on “9” in bottom line (page 9).
Click on “Time Calculations.”
Follow audio instructions.
Numeracy Tier: Time

Skill 54: Calculate What Time to Start

Job Setting
Cleaner: calculating time to start cleaning

Task Set
- Subtract amount of time needed for work from end time.
  Mentally subtract hours needed by counting backward.
  Look at analog clock and imagine present minute hand position.
  Count counter-clockwise by fives to new minute hand position.
  Remove another hour if hand passes twelve.

Documents
- None

Tools
- Analog clock

Tutor Preparation
- Prepare list of underlined vocabulary from script page.

Checklist
Correct starting time? □ ____________________________

Tips
- This is a tricky skill. Make sure you can do it easily before working with your student.

To Retest
- Reuse original job setting but vary job times and details.

☐ You have shown that you can calculate what time to start. You may highlight Skill 54 on the TIME TIER on your Skill Ladder. Now go to the enrichment activities, if available.

☐ More practice with calculating what time to start would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
The title of this activity is “Calculate What Time to Start.” In the last activity you set a time to stop a work task. In this activity you will set a time to begin.

Here is the job setting.
I am a cleaner who regularly cleans a church building, and you are my trainee. The church is being used for a wedding today. You must wash and wax the floor before the family of the bride arrives to decorate. Then you must unlock the church doors for the family before going home. You need to calculate when to start washing the floors.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.
Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Now back to the job setting.
Here is an analog clock. You may look at it if it will help your thinking.
Show analog clock.

Here are some numbers that will help you make your decision.
First the family will be arriving to decorate at 4:15 p.m. You will unlock the doors for them at that time. Secondly, it usually takes you about two hours to wash and wax the hall floor, and then you like the floor to dry for 45 minutes or so before anyone walks on it. Would you like me to repeat any of that information again?

How much time will you need altogether before 4:15? (RESPONSE) Correct as needed.

So what time do you think you should start cleaning the floors? (RESPONSE)
Discuss the answer with the student and encourage him to explain his thinking.

If the answer is wrong, or the student does not know how to proceed, follow these steps to subtract the amount of time needed for the work from the end time:
Look at the analog clock as you count backwards by fives to forty-five to get the new minutes. Decrease the hours by three because the minute hand “passed” 12.
Say the time in new hours and new minutes.

That's the end of this job activity!
Now give me a few minutes to make my notes, and then we'll see what's next.
New Numeracy Skill: Calculate What Time to Start

Learning/Practice Activities:
Tutor/Student

Skill: Calculate what time to start (time less than one hour prior).
   Tutor says initial clock time (e.g., 4:25).
   Tutor says time to be subtracted (e.g., go back forty minutes).
   Student looks at analog clock and imagines initial minute hand position.
   Student counts counter-clockwise by fives to reach number of minutes.
   Student “reads” new time from clock.

Skill: Calculate what time to start (time more than one hour prior).
   Tutor says initial clock time (e.g., 4:25).
   Tutor says time to be subtracted (e.g., go back 2 hours and forty minutes).
   Student mentally subtracts hours.
   Student looks at analog clock and imagines initial minute hand position.
   Student counts counter-clockwise by fives to reach number of minutes.
   Student subtracts one more hour if minute hand passes twelve.
   Student “reads” new time from clock.
Numeracy Tier: Time

Skill 55: Read 24-Hour Time

Job Setting
Nanny: reading 24-hour time from receipt

Task Set
- Find time on receipt.
- Read 24-hour time as is.
- Translate 24-hour time to 12-hour time.

Documents
- Form (Convenience Store Receipt)

Tools
- None

Tutor Preparation
- Photocopy ILLUSTRATION AD: Form (Convenience Store Receipt).
- Prepare list of underlined vocabulary from script page.

Checklist
- Time found on receipt? □ □
- Time read correctly in 24-hours? □ □
- Time read correctly in 12-hours? □ □

Tips
- None

To Retest
- Use real store receipt to reuse original job setting.

☐ You have shown that you can read 24-hour time. You may highlight Skill 55 which completes your TIME TIER. Now go to the enrichment activities if available.

☐ More practice with reading 24-hour time would be helpful. Let's look at some learning and practice activities. We will focus on (area of difficulty).
This is the last activity in your TIME TIER. You are almost at the top of your Numeracy Skill Ladder!

You have shown that you can read the time of day. We usually use only the numbers 1 to 12 to talk about time of day. However, sometimes businesses find it good to use the numbers 1-24. They use a twenty-four-hour time system. This means they don’t have to use the letters am or pm when they tell the time. Let’s talk about some times when people use 24-hour time.

(DIALOGUE)

Time is often given on store receipts in twenty-four hour time. In today’s activity you will read twenty-four hour time on a receipt. The title is “Reading 24-Hour Time.”

Here is the job setting.
I am a nanny, and you are my trainee. You have been shopping with the children, and have just bought a few things at the store. You have forgotten your watch, but need to know the time. You realize that you can read the time on the receipt that has just been given for your purchases.

Before continuing, let's take a moment to highlight the vocabulary in your glossary.

Help the student highlight each of the underlined vocabulary items above.
Beside each item, he should write or draw something to aid memory if needed.

Here is the store receipt. Can you find the time on it? (RESPONSE)

Show ILLUSTRATION V with store receipt.
Help with location of the time (look for colon) if needed.

Notice that the time is written by the 24-hour clock. What time does it say according to the 24-hour system? (RESPONSE)

Affirm a 24-hour reading.
Help if needed.

Now change that into 12-hour time using a.m. or p.m. (RESPONSE)

Affirm a correct translation.
If the student can't translate the time, demonstrate how to do so.

Okay! That's the end of this very last activity in your Skill Ladder. You've done so much hard work!
Now give me a few minutes to make my notes, and then we'll see what's next.
New Numeracy Skill: Read 24-Hour Time

Learning/Practice Activities:
Tutor/Student

Skill: Read 12:00 and 24:00 in twenty-four hour time.

Tutor writes 12:00.
   Student says “twelve noon.”

Tutor writes 24:00.
   Student says “twelve midnight.”

Skill: Tell if twenty-four hour time is a.m. or p.m.

Tutor writes 24-hour time (e.g., 3:05).
   Student looks at hour digit number.
   Student says “a.m.” time if hour digit number is less than 1 to 11.
   Student says “p.m.” if hour digit numbers is 12 to 24.

Skill: Read 12:01 to 12:59 in twenty-four-hour time.

Tutor writes time (12:01 to 12:59).
   Student reads digit numbers and adds p.m.

Skill: Convert hours 13 to 24 to 12-hour time.

Tutor writes hour (13 to 24).
   Student counts from 12 to hour given, putting down fingers.
   Student “reads” number of fingers down as hour and adds p.m.

Learning/Practice Activities:
Website Interactive

Skill: Read 24-hour time (seconds added); sort times into a.m. and p.m.

Website 11H
   Enter address: http://www.teachers.ash.org.au/jeather/
   Click on “Jenny Eather's Web Graphics.”
   Click on “On.”
   Click on “4” for the Site Channel.
   Click on “A Maths Dictionary for Kids.”
   Click on “Enter Here.”
   Click on “T.”
   Click on “twenty-four hour time.”
   Click on “Practice.”
   Drag times to a.m. or p.m. box.
   Ask tutor for feedback.
Learning/Practice Activities:
Website Printable

**Skill: Read 24-hour time as 12-hour time on a timetable.**
**Website 15A**

Enter address: [http://www.bbc.co.uk/](http://www.bbc.co.uk/)
Type “Skillswise” in search box at top right hand corner.
Click on “Skillswise Homepage.”
Click on “Tutor Center: Skillswise Material A-Z.”
Click on “Time – Using Timetables.”
Click on “Worksheet 1: Reading a Timetable.”
Print “Worksheet 1.”
Click on “Worksheet 1 Timetable.”
Print “Worksheet 1 Timetable.”

Challenge/Enrichment Activities:
Website Printable

**Skill: Plan journey using a 24-hour schedule.**
**Website 15B**

Enter address: [http://bbc.co.uk/](http://bbc.co.uk/)
Type “Skillswise” in search box at top right.
Click on “Tutor Center: Skillswise Material A–Z.”
Click on “Time-Using Timetables.”
Click on “Worksheet 2: Planning a Simple Journey.”
Print “Worksheet 2.”
Click on “Worksheet 2 Timetable.”
Print “Worksheet 2 Timetable.”

Enrichment Activities
Website Interactive

**Skill: Add and subtract time using twenty-four hour clock to calculate time in different time zones**
**Website 11I**

Click on “Jenny Eather's Web Graphics.”
Click on “A Maths Dictionary for Kids.”
Click on “Enter Here.”
Click on “T.”
Click on “time around the world.”
Move mouse over a specific time zone.
Read time on lower right to see time in that zone by 24-hour clock.
# ILLUSTRATIONS

**Illustration A: Form (Inventory Sheet)**

Skill 1

<table>
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<tr>
<th>Item Number</th>
<th>Description</th>
<th>May</th>
<th>June</th>
<th>July</th>
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<td>spruce</td>
<td>2×4</td>
<td>8 ft.</td>
<td>909</td>
</tr>
<tr>
<td>25618</td>
<td>untreated studs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>spruce</td>
<td>2×4</td>
<td>12 ft.</td>
<td>864</td>
</tr>
<tr>
<td>60532</td>
<td>treated studs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>pine</td>
<td>2×6</td>
<td>8 ft.</td>
<td>86</td>
</tr>
<tr>
<td>90538</td>
<td>treated studs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>pine</td>
<td>2×6</td>
<td>12 ft.</td>
<td>57</td>
</tr>
<tr>
<td>30944</td>
<td>treated studs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>spruce</td>
<td>2×6</td>
<td>8 ft.</td>
<td>576</td>
</tr>
<tr>
<td>80294</td>
<td>treated studs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>spruce</td>
<td>2×6</td>
<td>12 ft.</td>
<td>288</td>
</tr>
</tbody>
</table>
### Illustration B: Form (Inventory Sheet)
Skills 1, 2

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>80125</td>
<td>untreated studs pine</td>
<td>2×4</td>
<td>8 ft.</td>
<td></td>
</tr>
<tr>
<td>90462</td>
<td>untreated studs pine</td>
<td>2×4</td>
<td>12 ft.</td>
<td></td>
</tr>
<tr>
<td>10359</td>
<td>untreated studs spruce</td>
<td>2×4</td>
<td>8 ft.</td>
<td></td>
</tr>
<tr>
<td>25618</td>
<td>untreated studs spruce</td>
<td>2×4</td>
<td>12 ft.</td>
<td></td>
</tr>
<tr>
<td>60532</td>
<td>treated studs pine</td>
<td>2×6</td>
<td>8 ft.</td>
<td></td>
</tr>
<tr>
<td>90538</td>
<td>treated studs pine</td>
<td>2×6</td>
<td>12 ft.</td>
<td></td>
</tr>
<tr>
<td>30944</td>
<td>treated studs spruce</td>
<td>2×6</td>
<td>8 ft.</td>
<td></td>
</tr>
<tr>
<td>80294</td>
<td>treated studs spruce</td>
<td>2×6</td>
<td>12 ft.</td>
<td></td>
</tr>
</tbody>
</table>
### Illustration C: Form (Inventory Sheet)

**Skill 3**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
<th>Material</th>
<th>Size</th>
<th>Quantity May</th>
<th>Quantity June</th>
<th>Quantity July</th>
</tr>
</thead>
<tbody>
<tr>
<td>80125</td>
<td>untreated studs</td>
<td>pine</td>
<td>2×4</td>
<td>8 ft.</td>
<td>144</td>
<td>58</td>
</tr>
<tr>
<td>90462</td>
<td>untreated studs</td>
<td>pine</td>
<td>2×4</td>
<td>12 ft.</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>10359</td>
<td>untreated studs</td>
<td>spruce</td>
<td>2×4</td>
<td>8 ft.</td>
<td>909</td>
<td>814</td>
</tr>
<tr>
<td>25618</td>
<td>untreated studs</td>
<td>spruce</td>
<td>2×4</td>
<td>12 ft.</td>
<td>864</td>
<td>288</td>
</tr>
<tr>
<td>60532</td>
<td>treated studs</td>
<td>pine</td>
<td>2×6</td>
<td>8 ft.</td>
<td>86</td>
<td>29</td>
</tr>
<tr>
<td>90538</td>
<td>treated studs</td>
<td>pine</td>
<td>2×6</td>
<td>12 ft.</td>
<td>57</td>
<td>18</td>
</tr>
<tr>
<td>30944</td>
<td>treated studs</td>
<td>spruce</td>
<td>2×6</td>
<td>8 ft.</td>
<td>576</td>
<td>206</td>
</tr>
<tr>
<td>80294</td>
<td>treated studs</td>
<td>spruce</td>
<td>2×6</td>
<td>12 ft.</td>
<td>288</td>
<td>144</td>
</tr>
</tbody>
</table>
### Illustration D: School Worksheet (Numbers at Our School)

**Skill 4**

**Numbers at Our School**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of children this year</td>
<td>229</td>
</tr>
<tr>
<td>Number of children last year</td>
<td>185</td>
</tr>
<tr>
<td>Difference in number this year</td>
<td>44</td>
</tr>
<tr>
<td>Number of boys</td>
<td>117</td>
</tr>
<tr>
<td>Number of girls</td>
<td>112</td>
</tr>
<tr>
<td>Children born in Edmonton</td>
<td>118</td>
</tr>
<tr>
<td>Children not born in Edmonton</td>
<td>111</td>
</tr>
<tr>
<td>Children with brown eyes</td>
<td>163</td>
</tr>
<tr>
<td>Children with blue eyes</td>
<td>66</td>
</tr>
<tr>
<td>Children in Elementary classes</td>
<td>119</td>
</tr>
<tr>
<td>Children in Junior High classes</td>
<td>110</td>
</tr>
<tr>
<td>Children who walk to school</td>
<td>157</td>
</tr>
<tr>
<td>Children who take the bus</td>
<td>72</td>
</tr>
<tr>
<td>Children who stay for lunch</td>
<td>90</td>
</tr>
<tr>
<td>Children who are E.S.L.</td>
<td>115</td>
</tr>
<tr>
<td>Children in Kindergarten</td>
<td>30</td>
</tr>
<tr>
<td>Children in Morning Kindergarten</td>
<td>14</td>
</tr>
<tr>
<td>Children in Afternoon Kindergarten</td>
<td>16</td>
</tr>
</tbody>
</table>
Illustration E: Sign (Donations: Demo)  
Skill 8

Pennies for Charity

Wow! Today’s penny count is

one hundred fifty-four!
Illustration F: Sign (Donations)
Skills 8,10,12,14, 16, 18

Pennies for Charity

Wow! Today’s penny count is
Illustration G: Labels (Food in Freezer)
Skill 21
Illustration H: Labels (Food in Refrigerator)
Skill 21

- HOT DOGS: 10
- MEAT PIES: 9
- CAKES: 2
- BURRITOS: 8
Illustration I:  Labels (Food in Freezer: Retest)
Skill 21
Illustration J: Labels (Food in Refrigerator: Retest)
Skill 21
**Illustration K: List (Piecework Counts: Aug. 20–25)**
Skill 24

<table>
<thead>
<tr>
<th>T-Shirts:</th>
<th>Aug. 20-25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>37</td>
</tr>
<tr>
<td>Tuesday</td>
<td>43</td>
</tr>
<tr>
<td>Wednesday</td>
<td>26</td>
</tr>
<tr>
<td>Thursday</td>
<td>19</td>
</tr>
<tr>
<td>Friday</td>
<td>35</td>
</tr>
</tbody>
</table>
**Illustration L: List (Piecework Counts: Aug. 28–Sept. 1)**

Skill 25

<table>
<thead>
<tr>
<th>T-Shirts:</th>
<th>Aug. 28-Sept.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>30</td>
</tr>
<tr>
<td>Tuesday</td>
<td>40</td>
</tr>
<tr>
<td>Wednesday</td>
<td>20</td>
</tr>
<tr>
<td>Thursday</td>
<td>10</td>
</tr>
<tr>
<td>Friday</td>
<td>30</td>
</tr>
</tbody>
</table>
Illustration M: Diagram (Playground)
Skill 26
Illustration N: Diagram (Playground: Retest)
Skill 26
Illustration O: Form
(School Worksheet: Round Off Numbers)
Skill 29

WORKSHEET 22
NAME: ______________________
DATE: ______________________

Round-Off!
Round off each number to the last digit on the left.

229 ________________________________________________________________
185 ________________________________________________________________
44 _________________________________________________________________
417 _________________________________________________________________
721 _________________________________________________________________
18 _________________________________________________________________
6 _________________________________________________________________
66 _________________________________________________________________
329 _________________________________________________________________
490 _________________________________________________________________
157 _________________________________________________________________
72 _________________________________________________________________
### Illustration P: List (Piecework Counts: Sept. 4–Sept. 8)
Skill 30

<table>
<thead>
<tr>
<th>Day</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>28</td>
</tr>
<tr>
<td>Tuesday</td>
<td>32</td>
</tr>
<tr>
<td>Wednesday</td>
<td>19</td>
</tr>
<tr>
<td>Thursday</td>
<td>34</td>
</tr>
<tr>
<td>Friday</td>
<td>9</td>
</tr>
</tbody>
</table>
Illustration Q: Form (Store Receipt)
Skill 31

Refunds/Exchanges will be considered within 14 days with valid receipt
Your cashier is JANE

CHICLO GUM $ 4.36
SOFTIE TOILET TISSUE $ 8.96
WHITIE SUGAR $ 2.97
MOO MILK 4L $ 4.57

7.0% G.S.T. 105642806 $ 1.46

Balance Due $ 22.32
Cash $ 25.00
Change Due $ 2.68
Total Tax Paid $ 1.46

2006/04/28 20:35 1566 0544 18 00088780

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**Illustration R: Form (Cash Sheet)**

**Skill 35**

<table>
<thead>
<tr>
<th>Bills</th>
<th>Number</th>
<th>Denomination</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>× $100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Bills**

<table>
<thead>
<tr>
<th>Coins</th>
<th>Number</th>
<th>Denomination</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>× $2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>× $.01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Coins**

<table>
<thead>
<tr>
<th>Grand Total</th>
</tr>
</thead>
</table>
Illustration S: Cash Register Displays (Amount Owing)
Skill 37
Illustration T: Cash Register Displays (Amount Owing: Retest)
Skill 37
Illustration U: Form (Receipt Blank)
Skill 38

RECEIPT

DATE

NO. 0001

RECEIVED FROM

ADDRESS

AMOUNT dollars / $_______

FOR

☐ Cash
☐ Cheque
☐ Credit Card

Signature:

__________________________________________
Illustration V: Cash Register Displays (Change Due)
Skill 39
Illustration W: Cash Register Displays (Change Due: Retest)
Skill 39
**Illustration X: Sign (Fast-Food Menu Board)**
Skills 41, 43, 45

**SANDWICHES**
- Hamburger $3.50
- Cheeseburger $3.99
- Chicken Burger $4.50
- BLT $3.50
- Veggie $3.99

TRY ANY BURGER COMBO FOR $5.99

**SALADS**
- Green Salad $5.69
- Caesar Salad $5.89
- Greek Salad $5.89

**SIDES**
- Fries Small $1.89
  Large $2.49
- Onion Rings $2.79
- Baked Potato $1.69

**Pizza**
- Pepperoni $3.29
- Ham & Pineapple $3.50
- Vegetarian $4.50

- 14” Pizza $18.99

**DESSERTS**
- Muffin $1.59
- Apple Pie $0.99
- Ice Cream Cone Small $1.79
  Large $2.39
- Apple Slices $2.49

**BEVERAGES**
- Pop Small $1.29
  Large $1.79
- Orange or Apple Juice Small $1.69
  Large $2.39
- 2% Milk $1.69
- Chocolate Milk $1.69
- Coffee $1.49
- Tea $1.29

**SHAKES**
- Strawberry Small $3.49
  Large $4.39
- Vanilla
- Chocolate
Illustration Y: Taxi Meter (Amount Owing)

Skill 44

Fare 38.63

Katie
Kingsway
Front Entrance
Illustration Z: Taxi Meter (Amount Owing: Retest)
Skill 44
Illustration AA: Instructions (Recipe)
Skill 46

Granny's Old-Fashioned Health Loaf

Original recipe yield: 2 - 9x5 inch loaves.

Servings: 24

INGREDIENTS:

- 2 eggs
- 1/2 cup brown sugar
- 1/4 cup molasses
- 2 cups thick milk (add 1 tbsp lemon juice or vinegar per cup; let set 15 min)
- 3 cups whole wheat flour
- 1 1/2 cups seedless raisins
- 1 tsp salt
- 2 tsp baking soda

DIRECTIONS:

Combine flour, salt, and soda. Add raisins and toss to coat. Whisk together remaining ingredients. Make a well in centre of flour mixture, and add the flour mixture, stirring until combined. Spoon into prepared pans.

Bake in preheated oven at 350 for 1hr 10 min or until done. Cool on baking rack before removing from pan. Slice when cool.
Illustration AB: Note (To Frank)
Skill 46

July 30

Frank:

Hope everything is okay with you. We went ahead with the oatmeal cookies and baked them at 350°F for ______________.

See you tomorrow,
(Tutor's name)
## Illustration AC: Form (Timesheet: This Week)

### Skill 47

**Weekly Time Sheet**

<table>
<thead>
<tr>
<th>Weekday and Date</th>
<th>Employee</th>
<th>Start Work</th>
<th>Time Out (Lunch)</th>
<th>Time In (Lunch)</th>
<th>End Work</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 15/02/08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday 16/02/08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday 17/02/08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday 18/02/08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday 19/02/08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Illustration AD: Form (Receipt: Convenience Store)

Skill 55

Refunds/Exchanges will be considered within 14 days with valid receipt
Your cashier is JANE

CHICLO GUM $4.36
SOFTIE TOILET TISSUE $8.96
WHITIE SUGAR $2.97
MOO MILK 4L $4.57
7.0% G.S.T. 105642806 $1.46
Balance Due $22.32
Cash $25.00
Change Due $2.68
Total Tax Paid $1.46

2006/04/28 20:35 1566 0544 18 00088780

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Illustration AE: Candies to Count
Skill 20
Illustration AF: Bubble Gums to Count
Skill 20
Website Index and Acknowledgments

The author acknowledges the many excellent learning opportunities provided by the following websites:

**WEBSITE 1**  [http://www.aaaknow.com/](http://www.aaaknow.com/)

- Interactive arithmetic exercises and problems
- Simple and consistent formats

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Numbers and Words 1–50”</td>
<td>1</td>
</tr>
<tr>
<td>“Numbers and Words 51–99”</td>
<td>1</td>
</tr>
<tr>
<td>“Comparing One-Digit Numbers”</td>
<td>3</td>
</tr>
<tr>
<td>“Comparing Two-Digit Numbers”</td>
<td>3</td>
</tr>
<tr>
<td>“Comparing Three-Digit Numbers”</td>
<td>3</td>
</tr>
<tr>
<td>“Ordering One-Digit Numbers Ascending”</td>
<td>3</td>
</tr>
<tr>
<td>“Ordering One-Digit Numbers Descending”</td>
<td>3</td>
</tr>
<tr>
<td>“Ordering One-Digit Numbers Ascending and Descending”</td>
<td>3</td>
</tr>
<tr>
<td>“Ordering Two-Digit Numbers Descending”</td>
<td>3</td>
</tr>
<tr>
<td>“Ordering Three-Digit Numbers Ascending and Descending”</td>
<td>3</td>
</tr>
<tr>
<td>“Multiplication: Calculator”</td>
<td>7</td>
</tr>
<tr>
<td>“Counting by Fives”</td>
<td>9</td>
</tr>
<tr>
<td>“Counting by Tens”</td>
<td>11</td>
</tr>
<tr>
<td>“Adding Numbers I”</td>
<td>21</td>
</tr>
<tr>
<td>“Adding Numbers II”</td>
<td>21</td>
</tr>
<tr>
<td>“Addition Using Words”</td>
<td>21</td>
</tr>
<tr>
<td>“Adding Three Numbers”</td>
<td>21</td>
</tr>
<tr>
<td>“Next Number When Counting by Tens”</td>
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</tr>
<tr>
<td>“Addition Facts: All 10+10”</td>
<td>23</td>
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<tr>
<td>“Addition: Calculator”</td>
<td>24</td>
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<tr>
<td>“Adding Tens”</td>
<td>25</td>
</tr>
<tr>
<td>“Subtracting Numbers I”</td>
<td>26</td>
</tr>
<tr>
<td>“Subtracting Numbers II”</td>
<td>26</td>
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<tr>
<td>“Subtracting Using Words”</td>
<td>26</td>
</tr>
<tr>
<td>“Subtraction Facts: All 10+10”</td>
<td>26</td>
</tr>
<tr>
<td>“Subtraction: Calculator”</td>
<td>27</td>
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<tr>
<td>“Rounding”</td>
<td>29</td>
</tr>
<tr>
<td>“Nearest Hundred”</td>
<td>29</td>
</tr>
<tr>
<td>“Estimating Sums I”</td>
<td>30</td>
</tr>
<tr>
<td>“Add Money”</td>
<td>35</td>
</tr>
<tr>
<td>“Adding Nickels and Pennies”</td>
<td>36</td>
</tr>
<tr>
<td>“Adding Dimes and Pennies”</td>
<td>36</td>
</tr>
<tr>
<td>“Adding Dimes, Nickels and Pennies”</td>
<td>36</td>
</tr>
<tr>
<td>“Converting Coin Values”</td>
<td>40</td>
</tr>
<tr>
<td>“Subtract Money”</td>
<td>44</td>
</tr>
<tr>
<td>“Change from a Purchase”</td>
<td>45</td>
</tr>
</tbody>
</table>
WEBSITE 2  http://www.aplusmath.com/
Developed to help students improve their math skills interactively
Flashcards, Game Room, Homework Helper and Worksheets

2A  “Worksheets: Addition”  21
2B  “Flashcards: Addition”  21
2C  “Hidden Picture: Addition Version”  2
2D  “Worksheets: Subtraction”  26
2E  “Flashcards: Subtraction”  26
2F  “Hidden Picture: Subtraction Version”  26
2G  “Analog Clock”  48

WEBSITE 3  http://www.dfes.gov.uk/
Embedded Learning Portal, Dept. for Education and Skills, Gov. of UK
Online versions of the Skills for Life Learning Materials for adults
Audio and visual learning

3A  “Reading Times”  49
3B  “Recording a.m. & p.m. Times”  49
3C  “Understanding Times”  49
3D  “Time Calculations”  53

WEBSITE 4  http://www.dositey.com/
Interactive lessons for children (K-8) in math and Language Arts

4A  “Match Three-Digit Numbers with Textual Form”  1

WEBSITE 5  http://www.english-zone.com/
Online activities for adult ESL learners
Reading, writing, oral communication and math

5A  “What Time Is It?”  50
5B  “Money Honey!”  38

WEBSITE 6  http://www.funbrain.com/
Games and other activities (preschool to 17 and up)
Wide variety of subjects

6A  “Write Numbers 0–10”  2
6B  “Write Numbers 10–100”  2
6C  “Write Numbers 100–1000”  2
6D  “Spell Numbers 0–10”  4
6E  “Spell Numbers 10–100”  4
6F  “Spell Numbers 100–1000  4
6G  “Change Maker”  43
WEBSITE 7  http://www.psc.ac.uk/ace/home.php
From Peter Symonds College, Adult Continuing Education Department, UK
Interactive learning resources indexed to adult core curriculum
Workplace settings

7A  “Stock Take in the Wine Cellar”  19

WEBSITE 8  http://www.netrover.com/~jjrose/
Over 400 pages of educational activities for primary children

8A  “Room 108: Money Math”  39

WEBSITE 9  http://www.quia.com/
Collection of online games and quizzes created by users

9A  “Matching”  36

WEBSITE 10  http://www.shodor.org/
From Shodor Education Foundation (advancing science and math education
through use of modelling and simulation technologies

10A  “Estimator”  20
10B  “Clock Wise”  48
10C  “Elapsed Time”  52

Two websites that teach as well as test by Australian teacher Jenny Eather
Rainforest Maths: interactive math activities K-6
Maths Dictionary: interactive teach and test pages for math terms

11A  “Count to 30”  5
11B  “Count to 20, 50, 100”  5
11C  “Count by 2, 5, 10”  6, 9, 11
11D  “Addition”  21
11E  “10's Patterns”  23
11F  “Subtraction”  26
11G  “Rounding to 10, 100”  29
11H  “Twenty-four Hour Time”  55
11I  “Time Around the World”  55

WEBSITE 12  http://www.thatquiz.com/
Math tests online
Money units especially useful because Canadian currency option available

12A  “Money”  33, 34, 36
12B  “Time”  48
Students may access the above sites for interactive use, or download worksheets for individual use. Tutors must research individual copyright permission statements fully before making other use of these websites.
For the Student:

Welcome to Job Numeracy!

Welcome to Job Numeracy. You will work with your tutor on many of the basic number skills you need for jobs such as working in a daycare, driving a cab, handling cash, working in a warehouse, helping old people, etc.

Your tutor will do activities with you so that you can show the number skills you already have and learn new ones. The activities are in order on your Numeracy Skill Ladder. You will do them one by one so that there are no missing steps. Each time you finish a step, you will highlight it to show what you know.

Each activity is something you might do on the job. You and your tutor will do some role play here. In each job setting, the tutor will pretend to be the worker and you will pretend to be her trainee. In other words, you will be a worker who is just learning the new job.

As you talk about the job situations and number skills, you will be using lots of vocabulary from the job. As important job words come up, you can highlight them in your glossary.

At any time, you can ask your tutor questions, share ideas, and learn new vocabulary. This will be good practice in oral communication.

In many of the activities, you will be using documents such as timesheets, receipts, labels, recipes etc. That means that as you build your number skills, you will also be improving your document literacy.

You will improve your computer literacy as well by doing learning and enrichment activities on the computer. You will highlight the computer skills you are using on your Computer Skill Ladder.

You will probably be happy to see that you have many of the number skills you need for these jobs already. However, when you come to an activity that seems hard or confusing, there is no need to worry. Your tutor will help you finish the activity and then will help you learn more.

There is no need to hurry. Just go at your own speed and know that each activity builds your SKILLS FOR JOBS.

Good luck!
# Glossary

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<td>visiting homemaker</td>
<td>27</td>
</tr>
<tr>
<td>waiting in line</td>
<td>52</td>
</tr>
<tr>
<td>wallet</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>wax</td>
<td>54</td>
</tr>
<tr>
<td>weeks</td>
<td>46</td>
</tr>
<tr>
<td>weekly</td>
<td>25</td>
</tr>
<tr>
<td>years</td>
<td>46</td>
</tr>
<tr>
<td>zero</td>
<td>9</td>
</tr>
</tbody>
</table>
Numeracy Skill Ladder

See following pages.
# Numbers Tier

<table>
<thead>
<tr>
<th>SKILL</th>
<th>DOCUMENTS USED</th>
<th>JOBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 PRINT NUMBERS UP TO 1,000 IN WORDS</td>
<td>FORM (SCHOOL WORKSHEET)</td>
<td>NANNY</td>
</tr>
<tr>
<td>3 COMPARE NUMBERS UP TO 1,000</td>
<td>FORM (INVENTORY SHEET) STOCK</td>
<td>STOCK TAKER</td>
</tr>
<tr>
<td>2 WRITE DIGIT NUMBERS UP TO 1,000</td>
<td>FORM (INVENTORY SHEET) STOCK</td>
<td>STOCK TAKER</td>
</tr>
<tr>
<td>1 READ DIGIT NUMBERS UP TO 1,000</td>
<td>FORM (INVENTORY SHEET) STOCK</td>
<td>STOCK TAKER</td>
</tr>
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</table>

START!

Numeracy Skill Ladder
## Counting Tier

<table>
<thead>
<tr>
<th>Skill</th>
<th>Documents Used</th>
<th>Jobs</th>
</tr>
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<tbody>
<tr>
<td>20  ESTIMATE AND CHECK THE NUMBER</td>
<td></td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>19  COUNT ON BY ONES</td>
<td></td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>18  COUNT ON BY FIFTIES</td>
<td>SIGN (INFORMATION)</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>17  SKIP-COUNT OBJECTS BY FIFTIES</td>
<td></td>
<td>E WORKER</td>
</tr>
<tr>
<td>16  COUNT ON BY TWENTY-FIVES</td>
<td>SIGN (INFORMATION)</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>15  SKIP-COUNT OBJECTS BY TWENTY-FIVES</td>
<td></td>
<td>E WORKER</td>
</tr>
<tr>
<td>14  COUNT ON BY TWENTIES</td>
<td>SIGN (INFORMATION)</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>13  SKIP-COUNT OBJECTS BY TWENTIES</td>
<td></td>
<td>E WORKER</td>
</tr>
<tr>
<td>12  COUNT ON BY TENS</td>
<td>SIGN (INFORMATION)</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>11  SKIP-COUNT OBJECTS BY TENS</td>
<td></td>
<td>E WORKER</td>
</tr>
<tr>
<td>10  COUNT ON BY FIVES</td>
<td>SIGN (INFORMATION)</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>9   SKIP-COUNT OBJECTS BY FIVES</td>
<td></td>
<td>E WORKER</td>
</tr>
<tr>
<td>8   COUNT ON BY TWOS</td>
<td>SIGN (INFORMATION)</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>7   MULTIPLY ON A CALCULATOR</td>
<td></td>
<td>E WORKER</td>
</tr>
<tr>
<td>6   SKIP-COUNT OBJECTS BY TWOS</td>
<td></td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>5   COUNT BY ONES</td>
<td></td>
<td>DAYCARE WORKER</td>
</tr>
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</table>
## Number Operations Tier

<table>
<thead>
<tr>
<th>SKILL</th>
<th>DOCUMENTS USED</th>
<th>JOBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 ROUND OFF TO GUESS THE TOTAL</td>
<td>FORM (PIECEWORK OUTPUT)</td>
<td>SEWING MACHINE OPERATOR</td>
</tr>
<tr>
<td>29 ROUND OFF NUMBERS</td>
<td>FORM (SCHOOL WORKSHEET)</td>
<td>NANNY</td>
</tr>
<tr>
<td>28 DIVIDE USING A CALCULATOR</td>
<td></td>
<td>FOOD SERVER</td>
</tr>
<tr>
<td>27 SUBTRACT ON A CALCULATOR</td>
<td></td>
<td>VISITING HOMEMAKER</td>
</tr>
<tr>
<td>26 FIND A DIFFERENCE</td>
<td>DIAGRAM (PLAYGROUND) DIAGRAM (PLAYGROUND)</td>
<td>DAY CAR E WORKER</td>
</tr>
<tr>
<td>25 ADD MULTIPLES OF TEN</td>
<td>LIST (WORK OUTPUT)</td>
<td>SEWING MACHINE OPERATOR</td>
</tr>
<tr>
<td>24 ADD ON A CALCULATOR</td>
<td>LIST (WORK OUTPUT)</td>
<td>SEWING MACHINE OPERATOR</td>
</tr>
<tr>
<td>23 ADD ON TEN</td>
<td></td>
<td>KITCHEN HELPER</td>
</tr>
<tr>
<td>22 TOTAL NUMBERS HEARD</td>
<td></td>
<td>KITCHEN HELPER</td>
</tr>
<tr>
<td>21 TOTAL DIGIT NUMBERS</td>
<td>LABEL (QUANTITY) LABEL (QUANTITY)</td>
<td>KITCHEN HELPER</td>
</tr>
<tr>
<td>SKILL</td>
<td>DOCUMENTS USED</td>
<td>JOBS</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>45 ESTIMATE CHANGE</td>
<td>SIGN (MENU)</td>
<td>NANNY</td>
</tr>
<tr>
<td>44 SUBTRACT MONEY ON A CALCULATOR</td>
<td>CASH; SIGN (TAXI METER DISPLAY)</td>
<td>TAXI DRIVER</td>
</tr>
<tr>
<td>43 COUNT OUT CHANGE</td>
<td>CASH; SIGN (CASH REGISTER DISPLAY)</td>
<td>FOOD SERVER</td>
</tr>
<tr>
<td>42 ESTIMATE FOOD PRICES</td>
<td>FORM (STORE RECEIPT); LIST (GROCERY)</td>
<td>VISITING HOMEMAKER</td>
</tr>
<tr>
<td>41 ESTIMATE WHETHER YOU HAVE ENOUGH MONEY</td>
<td>CASH; SIGN (MENU)</td>
<td>BABYSITTER</td>
</tr>
<tr>
<td>40 EXCHANGE DENOMINATIONS</td>
<td>CASH</td>
<td>CASHIER</td>
</tr>
<tr>
<td>39 SELECT EXACT CASH</td>
<td>CASH; SIGN (CASH REGISTER DISPLAY)</td>
<td>CASHIER</td>
</tr>
<tr>
<td>38 WRITE MONEY IN WORDS ON DOCUMENTS</td>
<td>FORM (RECEIPT BLANK)</td>
<td>CLEANER</td>
</tr>
<tr>
<td>37 ACCEPT OR REJECT CASH PAYMENT</td>
<td>CASH; SIGN (CASH REGISTER DISPLAY)</td>
<td>CASHIER</td>
</tr>
<tr>
<td>36 COUNT MIXED CASH</td>
<td>CASH</td>
<td>VISITING HOMEMAKER</td>
</tr>
<tr>
<td>35 ADD MONEY WITH CALCULATOR</td>
<td>CASH; FORM (CASH SHEET)</td>
<td>CASHIER</td>
</tr>
<tr>
<td>34 COUNT CASH SETS</td>
<td>CASH</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>33 IDENTIFY CASH DENOMINATIONS</td>
<td>CASH</td>
<td>DAYCARE WORKER</td>
</tr>
<tr>
<td>32 WRITE MONEY IN DIGIT NOTATION</td>
<td>LABEL (PRICE TAG)</td>
<td>BABYSITTER</td>
</tr>
<tr>
<td>31 READ MONEY IN DIGIT NOTATION</td>
<td>FORM (STORE RECEIPT)</td>
<td>CASHIER</td>
</tr>
</tbody>
</table>
### Congratulations!

#### Time Tier

<table>
<thead>
<tr>
<th>Skill</th>
<th>Documents Used</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 Read 24-Hour Time</td>
<td>Sign (Road)</td>
<td>Taxi Driver</td>
</tr>
<tr>
<td>54 Calculate What Time to Start</td>
<td></td>
<td>Cleaner</td>
</tr>
<tr>
<td>53 Calculate What Time to Stop</td>
<td></td>
<td>Hairdresser</td>
</tr>
<tr>
<td>52 Calculate Elapsed Time</td>
<td></td>
<td>Food Server</td>
</tr>
<tr>
<td>51 Read a Timer</td>
<td></td>
<td>Hairdresser</td>
</tr>
<tr>
<td>50 Set a Timer</td>
<td></td>
<td>Visiting Homemaker</td>
</tr>
<tr>
<td>49 Read an Analog Clock Normally</td>
<td></td>
<td>Cleaner</td>
</tr>
<tr>
<td>48 Read an Analog Clock Digitally</td>
<td></td>
<td>Kitchen Helper</td>
</tr>
<tr>
<td>47 Read and Write Digital Time Schedule</td>
<td>(Timesheet)</td>
<td>Sewing Machine Operator</td>
</tr>
<tr>
<td>46 Read and Write Amounts of Time</td>
<td>Instructions (Recipe); Note</td>
<td>Kitchen Helper</td>
</tr>
</tbody>
</table>
Student Handout 1: Number Words
Skill 4

Cover the words on the left.
Print the words on the line.
Uncover the word to check.

one 1 __________________________________________________
two 2 __________________________________________________
three 3 __________________________________________________
four 4 __________________________________________________
five 5 ___________________________________________________
six 6 ____________________________________________________
seven 7 __________________________________________________
eight 8 __________________________________________________
nine 9 __________________________________________________
ten 10 ____________________________________________________
eleven 11 _________________________________________________
twelve 12 ________________________________________________
thirteen 13 ______________________________________________
fourteen 14 ______________________________________________
fifteen 15 ________________________________________________
sixteen 16 ________________________________________________
seventeen 17 ______________________________________________
eighteen 18 ______________________________________________
### Student Handout 1:  Spelling Number Words

<table>
<thead>
<tr>
<th>Number Word</th>
<th>Spelling</th>
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<tbody>
<tr>
<td>nineteen 19</td>
<td></td>
</tr>
<tr>
<td>twenty 20</td>
<td></td>
</tr>
<tr>
<td>twenty-one 21</td>
<td></td>
</tr>
<tr>
<td>thirty 30</td>
<td></td>
</tr>
<tr>
<td>forty 40</td>
<td></td>
</tr>
<tr>
<td>fifty 50</td>
<td></td>
</tr>
<tr>
<td>sixty 60</td>
<td></td>
</tr>
<tr>
<td>seventy 70</td>
<td></td>
</tr>
<tr>
<td>eighty 80</td>
<td></td>
</tr>
<tr>
<td>ninety 90</td>
<td></td>
</tr>
<tr>
<td>one hundred 100</td>
<td></td>
</tr>
</tbody>
</table>